

CONGRESS OF THE UNIVERSITIES
OF THE EMPIRE
1926

REPORT OF PROCEEDINGS

Universities Year Book.

ISSUED EARLY IN THE YEAR.

A compendium of the Calendar of all the Universities of the British Empire, giving names and degrees, of their administrators and teaching staff; brief accounts of their origin, constitution, equipment, endowments, curricula, degrees and diplomas, *fee*, residential accommodation, etc.; summaries of outstanding events of the preceding year; appendices dealing with matters of interest to students, *e.g.*, regulations of professional and licensing bodies, inter-university scholarships and grants in aid of research, statement of subjects in which the several Universities of the United Kingdom may be said to specialise.

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THIRD CONGRESS OF
THE UNIVERSITIES
OF THE EMPIRE
1926

REPORT OF PROCEEDINGS

EDITED BY
ALEX HILL, O.B.E., M.A., M.D.

AND PUBLISHED FOR THE UNIVERSITIES BUREAU
OF THE BRITISH EMPIRE



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1926

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FOREWORD.

THE Standing Committee of Vice-Chancellors and Principals at their meeting in July 1924 considered Sir Robert Falconer's most generous invitation to hold the third Congress in Toronto. Grave doubt having been expressed as to the possibility of securing a gathering representative of the Empire in any town outside Great Britain, the Committee reluctantly decided that it would not be wise to accept the offer. An invitation from the Council of the Senate of the University of Cambridge was received and accepted in October.

The procedure adopted in organizing the Congress followed closely on the lines of 1921. During the Autumn of 1924, Universities overseas were asked to propose subjects for discussion. In September 1925 eighty titles of subjects, of which the large majority had been suggested by Universities overseas, were submitted to the Standing Committee for consideration. It was agreed that the number of subjects to be discussed be limited to seven, one for each morning and afternoon session of Congress, with the exception of the Wednesday afternoon, and that the Wednesday afternoon be given up to delegates' and sectional meetings. In December the seven subjects generally considered most suitable were picked out; the final selection, wording of titles, and arrangement being left to the officers of the Bureau in consultation with the Chairman of the Standing Committee.

As in 1912 and in 1921 the Home Universities extended a cordial invitation to all Delegates from overseas to visit them in turn. Delegates were offered the choice of two tours, of which the itineraries were as follows: Party X—Dublin, Belfast, Durham or Sheffield, Glasgow, and Edinburgh, or Newcastle, Aberdeen, and St Andrews. Party Y—Reading, Cardiff, Bristol, Birmingham, Manchester or Liverpool, Leeds. On their return to London overseas Delegates were guests of the University of London until their departure for Cambridge by special train on the morning of 13th July.

Delegates from overseas and other members of Congress visited the various Schools and Colleges of the University of London. They were entertained to lunch by the Committee

owing to the existence of a generous spirit of endowment, not only in the past but also in these days, as witness Bristol University's beautiful building, are not called on to the same extent as the Governments of some of the Dominions for financial support of the Universities. They have, however, shown themselves generous where such support has proved needful. A grant of $1\frac{1}{2}$ million sterling towards an expenditure of over $3\frac{1}{2}$ millions (exclusive of that of our two senior Universities) is no mean assistance. Apart from the actual money grants, the investigations of the Universities Grants Committee, on which the grants are based, have a distinct value to the cause of University education, informing the public of its condition and its needs; and the creation of that Committee in the year following the War is a beneficent effect of the great struggle having stimulated a desire in the nation for education as a means for bettering the condition of the people. Evidence that has come directly under my knowledge of the interest of His Majesty's Government in the propagation of higher knowledge within the Empire is furnished by their constant circulation of research results throughout the Dominions, so that the practical effect of intensive study in one part of the Empire can inure at once to the full benefit of the rest of it. Yet again is this interest evidenced by the manner in which encouragement is being given to those who come together as in this Conference to help on the Empire's Universities. For this encouragement, for our entertainment here this morning, and for what has been said by the Chairman, and by Lord Eustace Percy, I express the thanks of the Delegates and Guests here assembled."

At Cambridge all members of the Congress were entertained by the Colleges or by resident members of the University. On the first evening the Master and Fellows of St John's College invited a very large number of University people to meet them at an "At Home." On the following day the Vice-Chancellor gave a garden-party at Downing Lodge, and the Master and Fellows of Christ's College gave a garden-party on the Thursday.

During the week-end, after the meeting of Congress, Delegates from overseas were the guests of the University of Oxford.

FOREWORD

and Provost of University College and by the Delegacy and Principal of King's College; to a reception at Bedford College; to tea at Westfield College, at the London (Royal Free Hospital) School of Medicine for Women, and at King's College for Women, Household and Social Science Department, the Imperial College of Science and Technology; to dinner at the London School of Economics. The Royal Holloway College gave a garden-party. The Vice-Chancellor and Senate of the University of London held a reception.

On Monday, 12th July, His Majesty's Government entertained the Delegates, the Chancellors and Rectors of the Universities of Great Britain and Ireland, and Presidents and Principals of Colleges at luncheon at the Hyde Park Hotel. The guests were received by the Right Hon. L. S. Amery, Secretary of State for Dominion and Colonial Affairs.

In proposing the toast of "Our Guests," Mr Amery said that the mere fact that the Congress was to meet—apart from the important subjects it was to discuss—was of the greatest value. Continuous intercourse between the Universities of the Empire could not but have its influence in promoting the unity of University life. It meant the intercourse of students and teachers, and it meant, what was even more important, the interchange and development of ideas. The last thing any of them wanted to arise from that intercourse and interchange was a dull level of uniformity in University life, but in one respect they did wish to see the Universities of the Empire inspired by one common ideal, and that was the ideal of setting a high standard of service.

Lord Eustace Percy, supporting the toast, said he approached his task with the proper humility which belonged to a Minister of Education in this country, who was quite rightly allowed to have little to do with the Universities. In the British Commonwealth they had always maintained the ideal that, while Governments might and should be concerned with the primary and secondary education of the people, it was for the Universities, independently of the State and independent of Government control, to set the standard of higher education throughout the country.

Replying to the toast, Lieut.-Colonel Sir Matthew Nathan, ex-Chancellor of the University of Queensland, said:

"With a keen sense of my inadequacy I rise to return thanks for the toast of the Delegates and Guests. I have a last-century interest in a college affiliated with Durham University that stands amidst palms on the shores of a West African estuary;

an already distant association at Pietermaritzburg in Natal with what is now a constituent College of the University of South Africa; an admiration for the institution I recently visited that was provided by Parsec philanthropy at the call of my distinguished successor in the Government of Hong-Kong, and a connexion with the University of Queensland at Brisbane in far-away North-Eastern Australia, that accounts for my presence here to-day. These qualifications scarcely seem to justify my standing up on behalf of the Delegates from threescore or more Universities spread over all five continents. * Still less do I, a person of small knowledge, feel that I can adequately speak for such wise men and learned doctors as have gathered from the ends of the earth to discuss subjects of which they have, in many cases, a life-long and intimate experience. All I can do is to put forward a few general impressions, and hope that they correspond to what my colleagues know from direct and close contact with University problems.

"Among those impressions possibly the foremost is that, as never before since learning ceased to be the exclusive prerogative of the Church, of certain professions, and of the landed or the leisured classes, has there been so general a demand for it. This demand has reached phenomenal proportions in the United States, where, however, difference in standards makes difficult comparison with figures relating to this country or to the Dominions. A single figure—11½ million dollars or 2½ millions sterling for the appropriation for a single University—the Columbia University of the City of New York—for the year beginning 1st July 1926 will give some idea of the American University scale. It would require a study that I have not devoted to it to make a comparison between the numbers of full-time students of our University standards that are now sitting at the American Universities and at ours. Here in Great Britain we are told that the number of full-time students—last year about 43,000—is more than half as many again as before the War. One quarter of them come from Scotland; obviously a much larger proportion than would have been deduced from comparison of populations. The keenness in Scotland for higher education, apart from consideration of the material advantages that it may bring, is too well known to require comment. Canada, with considerably more than half the number of University students that there are in Great Britain, is doubtless feeling the same impulse as the United States towards the highest form of education that is accessible. Ireland with some 4000, and Australia and New Zealand

together with some 8000 full-time students have about the same proportion to population as Great Britain. South Africa, with nearly 5000, has a much higher proportion to the number of its white people. It is not fair to bring India, with its great peasant population, into the comparison, especially as University education is largely a new growth in many parts of the land. There are said to be 75,000 University students in India and Buṛma, but 9 out of 18 Universities are of post-war creation, and all except 5 date from the first quarter of the twentieth century. The creation of two new Universities in Australia and one in Canada have marked this quarter, while there has also been in it much reorganization, including the creation of a number of new Colleges in South Africa. These facts and figures may be of some interest, but really to compare the desire for a high education of the different parts of the Empire would require consideration of the differing purposes for which their Universities were established and are maintained. In many cases the purpose is to afford access to the professions, and doubtless this purpose predominates in the Dominions. But in these, as in the home Universities, preparation for industry by instruction in Engineering and other applied science and for commerce are coming more into the curricula of Universities, while a new importance is being given in some of them to that old-time but very wise object of education—the rational enjoyment of life; or, in other words, the humanities. Nowadays it is largely by continuation, evening, adult, and extra-mural classes that the Universities are effecting this purpose among that growing body of the people who, without being able to go through a graduating course, rightly claim opportunity to discover delight in the delectable.

“The various developments and the general increase in higher education in the Empire have been helped by the direct action and the sympathetic consideration of its various Governments. In the long run, Universities could scarcely exist without the countenance of the State, and in many cases could not exist at all without its financial support. It is notably so with my own University—that of Queensland. In that country there are few wealthy persons, but there is an enlightened Government that makes generous provision to a self-governed University with activities intended to reach the whole of the people, and surrenders to it a general direction of education and research in the State. Other Australian Universities, though possibly not quite to the same extent, are much dependent on Government financial support. His Majesty's Government in this country,

owing to the existence of a generous spirit of endowment, not only in the past but also in these days, as witness Bristol University's beautiful building, are not called on to the same extent as the Governments of some of the Dominions for financial support of the Universities. They have, however, shown themselves generous where such support has proved needful. A grant of $1\frac{1}{2}$ million sterling towards an expenditure of over $3\frac{1}{2}$ millions (exclusive of that of our two senior Universities) is no mean assistance. Apart from the actual money grants, the investigations of the Universities Grants Committee, on which the grants are based, have a distinct value to the cause of University education, informing the public of its condition and its needs; and the creation of that Committee in the year following the War is a beneficent effect of the great struggle having stimulated a desire in the nation for education as a means for bettering the condition of the people. Evidence that has come directly under my knowledge of the interest of His Majesty's Government in the propagation of higher knowledge within the Empire is furnished by their constant circulation of research results throughout the Dominions, so that the practical effect of intensive study in one part of the Empire can inure at once to the full benefit of the rest of it. Yet again is this interest evidenced by the manner in which encouragement is being given to those who come together as in this Conference to help on the Empire's Universities. For this encouragement, for our entertainment here this morning, and for what has been said by the Chairman, and by Lord Eustace Percy, I express the thanks of the Delegates and Guests here assembled."

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CONGRESS OF UNIVERSITIES OF THE EMPIRE, 1926.

CHANCELLORS OF THE UNIVERSITIES OF GREAT BRITAIN AND IRELAND AND RECTORS OF THE SCOTTISH UNIVERSITIES.

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- THE RIGHT HON. THE EARL OF IVEAGH, K.P., LL.D., F.R.S., Chancellor of
the University of Dublin, Trinity College.

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REPORT OF PROCEEDINGS

TUESDAY, JULY 13—Morning Session.

CHAIRMAN:

THE RIGHT HON. THE EARL OF BALFOUR, K.G., O.M., HON.
LL.D., F.R.S., CHANCELLOR OF THE UNIVERSITY OF CAMBRIDGE,
CHANCELLOR OF THE UNIVERSITY OF EDINBURGH.

“The State and the University.”

FIRST SESSION.

THE CHAIRMAN: Ladies and Gentlemen; as Chancellor of the University of Cambridge I am commissioned to offer to all the representatives of Universities in any part of the Empire, here present, the warm welcome which this University desires to give them on this occasion. We are honoured by your presence, and we hope to be able to make your stay here not merely profitable but pleasant. These ancient walls receive a new dignity from the fact that they are the scene at which Universities from every part of the world, from every continent of the world, have sent representatives to what is one, I suppose, of the parent Universities, not only of the Empire but of modern civilization. Our programme this morning is a full one, and I certainly should not think of taking up your time by any long oration upon those subjects which are so profoundly occupying the minds of all those whom I am addressing.

One may at first perhaps be inclined to ask, What are the new problems which justify all those who are concerned with University teaching in coming from the furthest parts of the world to discuss them here? I do not think those problems in the main come, though they partly come, from what may roughly be called the social changes and evolutions of modern communities. They do not arise so much from these wider causes as from the narrower circumstances resulting from the enormous growth of modern knowledge. Why, you may ask, should the growth of modern knowledge in all departments raise these new problems? Why will not the old machinery, by further extension, cover all the ground that had to be dealt with by our forefathers when they founded and carried on the great parent Universities of Cambridge and Oxford?

The first reason is a prosaic and not always an agreeable reason. It is the problem of money. Modern education, for reasons of which the public are not always aware, is very expensive as compared with the education of even a hundred years ago or less, and this is very largely due—not of course entirely—to what I described just now as the growth of learning. The scientific side alone is enormously costly in these modern days. If ever your historic curiosity induces you to visit some of the so-called laboratories where great discoveries of profound and far-reaching effect were made in the past, you will be almost painfully surprised, I think, with the small and, let me add, cheap apparatus which was all that our forefathers had at their disposal. It is not our fault; it is really their fault that modern

science necessitates this immense and most costly growth of modern apparatus. It is the discoveries which they made with what seems almost ludicrously deficient machinery that has thrown upon us the burden of developing what they have done, and there is no possible way of doing that except by the very expensive methods which modern apparatus inevitably throws upon every institution which carries out its work properly. And when I add to that the immense cost of modern buildings, there is no difficulty really in understanding why it is that every University, or at all events every University of which I have personal knowledge, is very much in need of an increase in its pecuniary resources.

That, as I said, is in the main due to the growth of modern knowledge, and therefore in the main it is a most healthy sign. But while the growth of modern knowledge is a thing upon which we must all congratulate ourselves, of course it carries with it, as every change carries with it, not only improvement—at least we hope improvement has been attained—but also some characteristic dangers.

Undoubtedly the growth of learning has brought with it characteristic dangers. One, I think, is associated with this very question of money to which I have referred. If the State be asked to subscribe great funds, either in this country or in any of the Dominions, or indeed in any country, there will always be a natural and pardonable instinct on the part of the State to control and supervise the working of an institution which it is doing so much to support. It is perfectly natural but it is extremely dangerous. I do not think in the older Universities of this country, for various reasons, that there is any probability of the danger becoming a menacing one to any serious extent. Cambridge, Oxford, and the older Universities are receiving assistance from the State, but our University traditions are so deeply rooted that I do not think there is any symptom, as far as my judgment goes, of any Government attempting to interfere with the University autonomy which, whether it be well exercised or ill exercised, is at all events at the worst far better than State control.

We are not in this country so rich in millionaires to assist in education as the United States, where apparently there are large numbers of gentlemen not only with the means to assist Universities but animated by a desire to do so. We are less fortunately situated, though it would be ungrateful indeed not to recognize how much has been given in this country to the higher interests of University education. I am not aware

that a millionaire ever abuses his powers in this particular, whatever criticisms may be passed upon him in other spheres of life. He may conceivably desire that his money should be expended on something which to the University appears less important than other objects, but at all events it is always well spent, and I am sure that everyone whom I am addressing must feel that, directly or indirectly, he owes a debt of gratitude to the generous benefactor.

There are other dangers, of course, connected with this growth of learning. Specialization appears to me to be one of the most serious and one which is absolutely inevitable. You cannot in these days be absolutely in the forefront of any branch of study which you have made your own without to a certain extent neglecting, in a way which our forefathers were not compelled to neglect, other branches of learning carried on by colleagues in your own University or elsewhere. It is inevitable that both the pupil and the teacher should be in danger of over-specialization. There is no way, I think, of wholly avoiding that danger. But University life is in itself a great safeguard. If men engaged in the most diverse occupations, men pursuing learning in different spheres, daily meet together in intellectual and social intercourse, some of the greatest evils of over-specialization, if not wholly avoided, can be mitigated to a large extent.

There is only one other point which I would bring before you. I am (not in my capacity of Chancellor of Cambridge, but in a different sphere of activity) brought into contact with scientific and industrial research. I have no doubt whatever that the material progress of mankind depends upon the application of modern science to modern industry. But do not let us conceal from ourselves that, while the University may play and ought to play an immense part in this aspect of modern industry, it would be a fatal blow to the true ideal of the University to put immediate practical utility as the great ideal which the researchers of all Universities should keep before their minds. There is always the danger, when we are dealing with science in its application to industry, to look for immediate results. The greatest results which have come from science have not been immediate, and it requires a good deal of imagination to remember that those who do not value knowledge for its own sake cannot see that, without the efforts of those who *do* value knowledge for its own sake and are not looking for immediate material results, their own lower ideals would be very imperfectly accomplished. This higher research and the endeavour

to penetrate the secrets of nature, for the sake of knowledge and not for the sake of material advantage, is an ideal which must and ought to have its roots in the Universities. If the Universities ever allow themselves to be pulled down from the pedestal on which their past history has set them, if they regard themselves merely as ministers to the immediate economic needs and interests of the community in which they live, half their utility will be gone as centres of research.

It is no light problem to see how these two ideals can be reconciled, although they can be reconciled. I think the teachers in Universities ought to be ready to deal with the remoter problems of science on occasions when they are asked to do so by those more immediately connected with industry. It is quite clear to anybody who has studied the question that there are problems of the deeper secrets of nature, probably at any moment, certainly at this moment, which we have not penetrated but which, when we do penetrate them, will probably have immediate practical results. Those lie between the purely abstract pursuit of knowledge and the utilitarian aim of the researcher, and in the middle region I am convinced that the Universities, and not least the University which is offering you hospitality to-day, have a great work to do.

I will not occupy your time any longer. I am afraid you may think I have wandered a little at large over a very great subject. But I spoke from my heart, and I believe that all those who are interested in University education will feel that some of the points I have put before you are not unworthy of your consideration, if indeed they had not received it long before you collected in this hall.

THE STATE AND THE UNIVERSITY.

First Paper.

IN Canada, education comes entirely within the jurisdiction of the Provinces. There is no national system of education in the Dominion, no local system. There are thus as many educational systems in the country as there are Provinces. In some cases the system is an adaptation of those of the older Provinces; in others the provincial system is the product of evolution. No two systems are exactly similar. While all the provincial systems possess certain common factors in spite of their superficial differences, no serious attempt has ever been made to achieve complete uniformity in standards and methods. Uniformity in education, as in other matters, is contrary to the genius of the Canadian people.

The origin, purpose, and administration of the Universities bear evidence of diversity. Fortunately, Old World academic tradition is strong in this new land. The French-speaking Universities have patterned themselves after the Universities of France; the older English-speaking Universities mirror the British tradition; while the more recently organised Universities in western Canada are influenced by the Universities of the United States as well as by those of Great Britain and of eastern Canada. Furthermore, there is a growing disposition amongst the younger institutions to approximate the standards which have been set by the more advanced Universities of the older Provinces. Yet each Canadian University has its own individuality—its own local, provincial, or nation-wide constituency which it aims to serve adequately, with no slavish adherence to long-established academic traditions. In such diversity is fostered, amongst other elements of strength which have contributed to the cause of higher education, independence of thought and action, which, in turn, has made its contribution to the variety, the richness, and the vigour of the national life.

The Provinces fully recognize the place of University education in the intellectual, civic, and industrial life of the people, and have initiated a policy of higher education consistent with this recognition. The result is that the people, in ever-increasing numbers, are looking to the Universities for guidance, assistance, and intellectual leadership. To such an extent is this true that

the scope of the Universities is unlimited, provided they do not trespass upon fields already occupied by other educational agencies, and do not overstep the bounds imposed by financial considerations.

Canadians have set for themselves the goal of universal education. They have adopted the policy of the open door—open to all, that is, as regards creed and race, though the rapidly rising standards of admission to the Universities constitute a barrier which negatives to a great extent this open-door policy so far as higher education is concerned. While it is not claimed that all are ambitious of a University degree, much less that all are seeking education for its own sake, yet so profound is the belief of the people in higher education, so insistent the demand for it, so great the willingness of increasing numbers to bear the rapidly mounting costs, that University authorities are unable to provide the necessary buildings, equipment, and teaching staffs.

University education has captured the imagination of the people. With many the desire for a University education has become more than a conviction, it is nothing less than a passion. The result has been that into the Universities have been drawn representatives of every station in life—the rich, the poor; the young, the mature; those with good academic qualifications, and those without; those who are eager to learn, as well as the poor in mind and spirit. To cope with the problem of those last named, the undesirables, who are a drain upon the State as well as their guardians, it is the policy of most of the Universities to require students to withdraw who do not make satisfactory progress. This policy has been very effective in eliminating triflers, as well as those who do not possess the requisite intellectual capacity.

CLASSES OF UNIVERSITIES.

Canadian Universities may be roughly divided into three main classes: those which owe their establishment to one or other of the religious denominations; those that have been built by the benefactions of private individuals; and those that owe their origin to the State. The distinction between these three types has largely broken down. Since the denominational Universities no longer require religious tests, and since the privately endowed ones are in effect quasi-public institutions, it is not easy to define the distinctive characteristics of each class; in fact, from the purely educational point of view they do not differ

from one another in any fundamental respect. The differences are, in the main, differences in degree rather than in kind. All three types are developing side by side, and are characteristic of different stages of University development and of different sections of the Dominion. In eastern Canada, the first part to be settled, denominational and privately endowed Universities predominate; in the central part of the country all three types are represented; while in western Canada all the Universities have been established by the State and are supported by it. Each type has made, and continues to make, its distinctive contribution to the intellectual life of the Dominion. The number of State Universities has increased considerably during the past two decades, while the number of denominational and privately supported ones has remained stationary. As to the academic standards set and the scholastic achievements attained, the students who come from them must furnish the answer.

The popular distinction in the public mind between a privately endowed University and a State University is that the former is financed by alumni and friends, while the latter is dependent upon the Legislature for its financial support. Again, privately endowed Universities are popularly supposed to possess the larger measure of freedom in the choice of staff, curricula, and methods of administration. There are those who claim for them that they are less utilitarian, less influenced by the insistent demands of the hour. In some quarters they are regarded as being more free to raise their standards for matriculation, to keep their registration more nearly within bounds, to provide better facilities for fostering the community life among their students, to maintain a higher grade of scholarship, especially in the humanitarian subjects, and to afford better opportunities for specialization and for graduate study. Moreover, freedom from State control is presumed by some to guarantee a larger measure of academic freedom than is accorded the professorial staffs of State Universities.

The experience of University authorities in Canada, however, does not bear out these claims. If it did, the distinction between the two classes would be very much more pronounced than it is. Aside from certain denominational Universities, there is but one institution of higher learning in the Dominion which is not in receipt of direct State aid. Not infrequently privately endowed Universities which have the reputation of being very wealthy have had their prestige endangered by lack of financial support—the notion of their vast resources, having become a fixed idea in the popular mind, having persisted long after there was any

ground for such an impression. No single benefactor can erect, equip, staff, and endow a modern University on a sufficiently munificent scale to meet the requirements of its growth. This is evident when one considers that the governing bodies of private institutions are frequently under no less pressure owing to the apathy or inability of their financial supporters than are the boards of governors of the State Universities. Indeed, since the State is usually more generous than private individuals, the financial pressure is frequently less in the case of the State University. The collecting of funds for the support of Universities is always a difficult task, whether the source be private individuals, groups, or legislatures. The task is becoming increasingly difficult in the case of private foundations in proportion as the State collects an increasing part of the wealth of public-spirited citizens who formerly gave generously to education. Furthermore, it is becoming more and more common for State Universities to receive munificent benefactions from private sources. In a country such as Canada, where there is no great concentration of wealth, and where the State support of education is generous, it would appear that higher education will come to centre more and more in the State Universities.

STATE CONTROL.

State Universities are supported by appropriations from the provincial Legislatures, by student fees, and by State and private endowments. State support presupposes a measure of State control. Some educationists distrust governmental control of Universities as being inseparably connected with political interference. But while State control of education always implies a danger of political interference, a danger also that academic freedom may in a measure be curtailed, political interference in University affairs in Canada has not, for decades, been such as to leave the State Universities open to the suspicion of being less independent, either in their academic or administrative capacities, than privately supported institutions. The fact is that, whether the source of revenue be public or private, Universities cannot claim for themselves complete freedom of action in formulating and carrying out their policies. The policies of State and endowed Universities alike are open to challenge and criticism; but it cannot be said that the governors of a State University in Canada are any more liable to be dictated to by the Legislature than the governing board of an endowed institution is liable to be dictated to by private benefactors.

THE BOARD OF GOVERNORS.

While a measure of financial control by the Government is necessary, it is essential that the University be free politically as well as academically. To secure this freedom, the business administration of State Universities is usually vested in a Board of Governors, composed of a small number of outstanding professional and business men who are interested in, and well informed on, educational matters. The members of the Board are appointed for a term of years by the Lieutenant-Governor in Council, and serve without remuneration. As they are chosen without regard to party affiliations, they do not change when there is a change of Government.

To this body is delegated the responsibility for the management, administration, and control of the property, the revenues, and all other business affairs of the University. The Board submits its estimates to the Government, prepares the budget based on the legislative grant, and has an absolutely free hand in all matters pertaining to ordinary expenditure. In some instances the Board administers all extraordinary capital expenditures, such as those involved in erecting new buildings. After the financial requirements for the ensuing year have been presented, the entire responsibility for granting or refusing the amount requested rests with the Legislature. The Board considers that its duty has been done when it has administered its previous grant wisely and has stated the financial requirements for the coming year fairly and fully.

ACADEMIC FREEDOM.

The academic freedom of the professorial staff in the State Universities of Canada is even more jealously guarded and more universally respected than is freedom from political interference in matters affecting the financial administration of the Universities. Legislatures are not interested in staff appointments or in the details of academic policies. They leave the Universities completely autonomous in these respects. The Board of Governors are free to secure the best qualified men available without respect to nationality or place of training. The professors in a State University live in as free an academic atmosphere as do those in a privately endowed University. Personal preferences there are, but the professoriate of State Universities show no general desire to seek a larger freedom in institutions not under State control.

STATE UNIVERSITIES AND UTILITARIAN SUBJECTS.

All Canadian Universities, without respect to their origin, are concerned with education in three principal aspects: cultural, professional, and technological. While the courses offered in the liberal arts and in the pure sciences constitute the basis for all University education, and while they continue to attract the greater part of the student population, engineering, agriculture, and business are given a generous measure of encouragement and support. Although the general adoption of this policy might be regarded by some as a too easy yielding to a popular demand, the results obtained would appear fully to justify the practice as maintaining an even balance between the cultural subjects on the one hand, and the professional and technological subjects on the other. The unwillingness of the Universities to meet the full expectations of those elements of the population which are primarily interested in utilitarian education has resulted in a measure of disappointment, even of disillusionment, on the part of some, but these evidences of dissatisfaction have not yet manifested themselves in any appreciable diminution in the numbers demanding admittance.

UNIVERSITIES AND RESEARCH.

One of the important duties of a State University is to meet the reasonable expectation of the country in the matter of research no less than in respect to the most advanced teaching. Some years ago the Dominion Government, recognizing its duty in this respect, established the Honorary Advisory Council for Scientific and Industrial Research. This national organization has done much to foster research in the Universities, and has been instrumental in giving to graduates who have the requisite training, ability, and aptitude for research, new and enlarged opportunities to prosecute their studies in Canada. With this body all the Canadian Universities are co-operating. But the most significant advance in University policy within recent years is the establishment, in two Canadian Universities, of graduate schools. Heretofore the lack of facilities for advanced graduate work in Canada has resulted in a heavy drain on the intellectual resources of the Dominion, and it was to check this exodus that these schools were established. At present, facilities for the most advanced work are available in a comparatively limited number of subjects; but within this restricted field every facility is offered and every encouragement is given creative scholarship.

L. S. KLINCK.

UNIVERSITIES AND THE STATE.

Second Paper.

As one of the representatives of a Dominion University, I cannot pretend to tell you just what the relationship of State and University *should be*, and I do not know much of what it *is*, in all the British Commonwealth of Nations. I hope merely to contribute, from my own and my country's limited experience, a starting-point for your discussion of a subject that is very difficult, but not to be avoided.

I am told that the Universities of the British Isles are still completely autonomous. After Royal Commissions, Departmental Committees, Boards of Education, representation of Public Authorities on their governing bodies, State and Municipal subsidies, a Labour Government, and Sir William McCormick's Committee, they are none the less absolutely self-controlled : they move only from within. Their funds, however now obtained, are, like their ancient private wealth, administered at their own unfettered discretion ; their largely increased public services, which make them felt more than ever in the life of the State, are left, in character and extent, wholly to their long-trained sense of public duty. Elementary education is a function of the State ; secondary education is becoming more and more so ; technical education, apart from the Universities, is likely to get increased State support and control ; associations of teachers are demanding that " public opinion " shall " accept education as needing a continuous and steadily increasing provision and as a national service . . . " But, among the victories of British common sense, there still remains the British Government policy to support the Universities, and to leave them free as they were in the days before the State controlled any education.

This is an almost ideal situation, from the Universities' point of view. But it is not exactly characteristic of State and University in the Dominions, and perhaps it could not be.

Let me speak only from my knowledge of Australia, and with reference to its place in British University tradition. Its first University, Sydney, was founded seventy-five years ago. The precedents used were wholly British. There has been practically no foreign influence such as the American University felt so

long from Germany, and transmitted to the Canadian University. By good luck, including the long line of great scholars and men of science from Oxford and Cambridge and Scotland who have held the principal Sydney Chairs, the evil precedent set by "the unfortunate accident which in 1836 placed a purely examining body on the University throne in London" was, though encountered, yet avoided. And a good model of statesmanlike foresight was created as nearly as possible in the image and after the likeness of a British traditional university. Perhaps in these days of the "new" and "sensational" architecture, you may spare me time to illustrate how soundly traditional was our beginning as it took shape before the astonished eyes of our people. The population of New South Wales was then 200,000. The main building of the University, alone, cost eight shillings per head of the population, was accurately and most beautifully designed to compare with the Gothic collegiate architecture of Old England, and to contain a hall whose inspiration was Westminster Hall itself. This work was all complete in 1859, when the number of matriculating students was five. The first graduates, to the number of seven, had faced the world in 1856. The most distinguished of them became Attorney-General, a Supreme Court Judge, and Chancellor of the University. While he was in Parliament it was the fashion among his political opponents to twit him with having an education that cost the country a hundred thousand pounds, and seemed hardly worth the money. There is nobody now who thinks of that extravagant building otherwise than with pride in itself, its purpose, and the record for which time allows it to stand. It is the touchstone of all Australian University architecture, a magnet for Australian private generosity. The thrill of its beauty reveals its symbolism to everyone. All is British, this and everything else that makes a University in Australia, and much of it was conceived by politicians and executed by the State.

The Australian who speaks with hostility of State relationship to the University in Australia may be thinking of some transient objectionable policies or the actions of some one bad Government. He forgets that, but for enlightened and beneficent Ministers, there would have been no Universities at all so early as the 'fifties of last century, and no continuous creation of Universities until, in 1913, every State in Australia had its own. The public money spent on these must be counted in millions. Private benefactions, slowly accruing, are perhaps a millior and a half. And few hard bargains have been driven at the

Universities' expense. There has never been a sustained public policy that is contrary to the right British University tradition. But there have been and there always will be dangers in the large and necessary dependence of the University upon the State that characterises Australia.

The State had to make roads and railways to open our territory for settlement. It soon found itself obliged to declare that elementary education must be free and compulsory, and under State direction where none else was preferred. There has long been practically no illiteracy in Australia, thanks chiefly to the State school system and the (over 97 per cent.) British origin of its people. In recent years the State has naturally extended its range into secondary education. Upon that, it has begun to secure an easier transition of its best-equipped pupils into the Universities. It believes that poverty should be no longer so great a bar as it has been to those fit for and desiring a University education. Numbers can justify its supposition that among the comparatively poor a large element of the potential riches of the national intellect should be found. The private benefactors and the fees of a modern British University never enable it to take all the free scholars it would like to have. Only the State seems able to give every eager and competent boy and girl the right to free University training, in spite of poverty. At least, that is so in Australia, and public policy is more or less set in that direction. It has not yet found a quite satisfactory *method*, and has brought new excessive burdens upon some of the Universities—that of Western Australia, for example, may charge no fees, even to its wealthiest students; that of Sydney is paid by the Government far less than its "exhibitioners," or free students, cost, and, even so, the Government makes exhibitioners of many who ought to pay. Other faults in the application of a policy might be quoted. But, however they prejudice the University, they do not force upon it unfit material from the State schools—as may happen with an American State University logically treated as a unit in one State educational machine. The Australian University selects and disposes of its students as it thinks right. It is not under State control.

Yet it is regularly in close and friendly touch with parliamentary and permanent Heads of Departments of State; it is always consulting them—especially Under-Secretaries and Directors of Education—about the satisfaction of its needs, and it has accepted Government nominees and Parliamentary representatives on its own governing body, called "Senate" or

" Council." There is, of course, a certain limit to autonomy in that very fact—and there is danger. Wherever politicians enter, suspicion may enter and proceed to represent their political animosities. And the breath of partisanship is blighting to academic freedom, as to every other kind of academic worth. But the University is usually treated as above or outside politics. The Government nominees are usually well chosen, for some special qualifications and as a mark of honour. Being of high principles and independent nature, they are as true as anyone else to the ideal of the University, as they comprehend it. • The danger of political nominations has not been more than a threat.

There are far worse threatenings possible, on the political side. State subsidies to Australian Universities are, in the main, " statutory "—they do not depend on the passing of annual estimates by Parliament. Yet for a quite important part of its income a University may be temporarily, at least, " on the estimates." Partisans whom it displeases may then suggest " revision of the estimates." Bargains of the " no bun, no bear " kind may thereafter be hinted as the price of solvency. But these angry gestures pass—it would be only a desperate gang of political adventurers who would try to harm a University in that way. More serious is the risk of being used in legislative programmes or the propaganda of political parties. The prouder the people are of their University, the more they desire to spread its benefits, the more jealous they become over its privileges. Political parties are tempted to make capital out of this. And the University may find movements begun in esteem for it tending towards legislation that it could not approve. For example, the older Universities are called after the capital cities in which they were placed—Sydney, Melbourne, Adelaide ; the younger ones are called after their whole States—Tasmania, Queensland, Western Australia. Growth of pride in possession of a University, growth of desire to profit by it all through the land were mixed, in that change of name, with rural jealousy over the swelling of capital city at the expense of country towns, and with consciousness that city and country interests were diverging rather too widely from one another.

Here entered the demand that the University, being the University of the country as well as the city, should accept country people as students, even if they could not come to its classrooms in town ; and no longer deny them its degrees, if they could pass its examinations. The State has led in several expedients to meet that claim. It has, for example,

erected in Queensland a University with a department of "teaching by correspondence." Last year it paid the expense of lecturers appointed by Sydney to try the experiment of doing some work of an Arts course with matriculated students in three country towns. Attempts to let the University go to the student if the student cannot come to the University have been rather costly for what they have achieved, and the State is somewhat shy of them now. It is still doubtful whether any elaborate method of teaching students away from the University is practicable and sound enough to be worth the expense. The simplest method of merely giving country students a syllabus and setting them an examination upon it, is no doubt cheap and practicable. But what has it to do with teaching, or with the idea of a University? The State's own teachers are trained in colleges.

The appearance of "Country Parties" in Australian legislatures, between the stock divisions of "Labour" and "Nationalist," and the rising ambition of certain country towns, have drawn the question of the University's duty to country students more into the foreground of politics. Some people urge the State to force examinational degrees upon the Universities, some politicians reply to them that such action may indeed be a "plank" of the party "platform." Some others say that an examinational degree would be a helpful thing, in Australian conditions, but that the *Commonwealth* Government should be asked to establish a seventh University for examinational purposes, the present teaching Universities being left strictly to their duty of teaching and research. A Commission is at this moment studying the project of a Commonwealth University at Canberra for the Federal Government. I cannot forecast the result. I can only tell you that, in the past, both electors and ministrics have been generally sound on the British University tradition. They have recognised the very possible difference between a University degree and a University education; they know that the examination in itself may be a necessary evil, but that it is an evil of which the *teaching* University may hope to make an end if not forced to accept public examining of the practically untaught as one of its vital functions; they have been quick to see the truth of Newman's great utterance (which ought to be quoted before every one of our Congresses, and hereby is):

"If I had to choose between a so-called university which dispensed with residence and tutorial superintendence and

gave its degrees to any person who passed an examination in a wide range of subjects, and a University which had no professors or examinations at all, but merely brought a number of young men together for three or four years and then sent them away. . . . I have no hesitation in giving the preference to that University which did nothing, over that which exacted of its members an acquaintance with every science under the sun. . . . When a multitude of young men, keen, open-hearted, sympathetic, and observant, as young men are, come together and freely mix with each other, they are sure to learn from one another, even if there be no one to teach them; the conversation of all is a series of lectures to each, and they gain for themselves new ideas and views, fresh matter of thought, and distinct principles for judging and acting day by day."

I don't suppose any Australian public men have studied much of the report of Lord Haldane's Commission on London University—yet probably most of them would admit the evident reasonableness, in Australian experience, of its reaction against the evils of a purely examining system. Many of them may have looked through the more recent report of Sir Harry Reichel's Commission on the University of New Zealand and agreed with it that that University has "exactly the shortcomings" due to "foundation on the pattern adopted for London," re-reading in it, with growing approval, the older ideal summary of reasons why a University should never substitute examining for teaching or subordinate teaching to examinations:

"We are convinced that both a detailed syllabus and an external examination are inconsistent with the true interests of University education, injurious to the students, degrading to the teachers, and ineffective for the attainment of the ends they are supposed to promote. The insistence on a system of external examinations is always based upon want of faith in the teachers. Even the so-called internal examinations of the University of London are practically external, because of the large number of institutions involved, and the demands of the common syllabus; and the syllabus is a device to maintain a standard among institutions which are not all of University rank. The effect upon the students and the teachers is disastrous. The students have the ordeal of the examination hanging over them, and must

prepare themselves for it or fail to get the degree. Thus the degree comes first and the education a bad second. They cannot help thinking of what will pay; they lose theoretic interest in the subjects of study, and with it the freedom, the thought, the reflection, the spirit of inquiry which are the atmosphere of University work. They cannot pursue knowledge both for its own sake and also for the sake of passing the test of an examination. Moreover, the teachers' powers are restricted by the syllabus; their freedom in dealing with their subject in their own way is limited; and they must either direct their teaching to preparation for an examination which is for each of them practically external, or else lose the interest and attention of their students. Indeed, the best teachers are apt to lose their students' attention either way, for if they teach unreservedly by the syllabus their own interest must flag, and consequently that of their hearers also. . . . But examinations, even when conducted by teachers of the University, and based upon the instruction given by them, ought not to be the only tests for the degree. It is not right that the work of years should be judged by the answers given to examination-papers in a few hours. It cannot be fairly tested in this way. However conducted, such examinations are an insufficient and inconclusive test of the attainment of a University education; and when account is taken of individual idiosyncrasies and the special qualities which examinations favour, and when allowances are made for the accidents which inevitably attend such limited and occasional tests, it appears to us only fair that due weight should be given to the whole record of the students' work in the University. If the academic freedom of the professors and the students is to be maintained—if scope for individual initiative is to be allowed to the professors, and the students are to profit to the full by their instruction—it is absolutely necessary that, subject to proper safeguards, the degrees of the University should practically be the certificates given by the professors themselves, and that the students should have entire confidence that they may trust their academic fate to honest work under their instruction and direction. There is no difficulty whatever in the University providing for such control, regulation, and publicity as will be an adequate guarantee of impartiality, and of such a measure of uniformity as may be considered desirable."

The Australian State has actually done much to safeguard our Universities against the "external degree" method, by making entrance easy and cheap or actually free to well-qualified boys and girls just leaving school, or by subsidising schemes of evening lectures at a University. The number of such young people driven by poverty into remoteness from the University, and into a life-long discontent perhaps, has been greatly reduced by some Governments. The country demand for University privileges is now mostly from older unsatisfied people (a decreasing class), and from towns anxious for the honour of housing some provincial college or branch of the University in their capital. There is no political reason why a new University should not spring full-equipped from the heart or brain of an Australian of wealth, within the sphere of an existing University. But we have had no Rockefellers and Stanfords, though many noble benefactors. It is almost certain that new provincial Colleges or Universities will be founded by the State—and, of course, they may be ill-founded.

My point is this—the relationship of State and University has to be more dangerous in one part of the Empire than in another. We should accept the danger with the benefits. And we should feel hopeful of the future from the record of the past. Think of that "unfortunate accident of 1836" and the stumbling-block it placed in our way. Think of your governments and parliament, never more alive with University men, who are hard to deceive on any point of University principle, tradition, or practice; and then remember that our oldest University family is only in its third generation, and our graduates are only beginning to appear in politics. Nothing but British common sense and respect for the principles deducible from British history, colonial and pre-colonial, have been our guide, or can save us yet from serious error. I trust them still.

Let me end, as I began, with an architectural reference. In Australia the State builds for the University. The Government of New South Wales, for example, has built practically everything for the University of Sydney, and is now completing a programme of £50,000 a year spent since the War in bringing the science buildings, especially, up to modern requirements and the increased enrolment of students. Is there anything wrong with that relationship of State and University? I should like to see it universal, and the model of all the other relationships—the State providing much of the means, and the University attending to their use, each with full confidence in the other.

E. R. HOLME.

Discussion.

PROFESSOR HOLME (Sydney): I shall not read my printed paper. Not only is it too long, and, in some of its facts, too familiar, but you are, also, an audience of people with the Johnsonian ability to read a page at a glance, and tear the heart out of any mass of words, in very short time. May I just add an introduction and couple of footnotes? After reading the paper you will see that they are not irrelevant.

I wish, first, to give thanks, on behalf of the Australian Universities, for the honour of being permitted to open a discussion here and on this important subject. I am sorry that, by a series of accidents, Australia has to speak through me, being able to do much better. I am not even one of those from the Dominions who, coming to Cambridge, are just coming home, and can be at ease in their Zion. I belong to the outer court—the court of the colonials, altogether. In these gloriously historic surroundings, in which I have no part, my thanks cannot be adequate—for lack of knowledge. Yet they must sound among monuments and men representing the dateless origin and unparalleled greatness of British University tradition. I can only say that my country is a proud and loyal partaker of your inheritance. It draws many of its teachers and much of its inspiration from Cambridge. It does its best to add rightly to the ever-reforming Globe of Precedents whose first makers were the two ancient homes of learning in England. It hopes to do its share with the other British Universities in turning the difficulties of the present into the national triumphs of the future. And the recognition of its efforts at these centres of our life-force as a Commonwealth of Nations is a precious encouragement.

Secondly, I must apologize for the lack of precise information in my paper. It was ordered of me by telegraph after I had left, all unprovided with documents, on a long series of journeys that brought me to London only in time to write. I had, therefore, to confine myself to a general statement. But I am not without some knowledge that I could not quote by chapter and verse. I have, for example, read the Report of the Departmental Committee on the University of London and do not forget that the Committee finds “there are not only historical reasons but also reasons of policy to justify the retention of a characteristic of the University of London,” which characteristic Sir Harry Reichel’s Commission has recently called an “unfortunate accident.” But my business was not to criticize the

external system as it is at London and, above all, not to meddle with London's "reasons of policy." I tried only to show how London constituted a precedent for the Empire in 1836 and how reasons of policy in that part of the Empire which I know made the precedent dangerous, as well as how New Zealand has now been competently advised against its further adoption.

I am also not unaware that recent developments at London have resulted in changing certain "external" examinations into "internal" examinations so that "the external ones may or may not be identical with those taken by internal students," as the Departmental Committee very significantly says. But I repeat that I am not concerned with London as a University and I do not criticize London as a University. I speak of *precedents* and of the difficulty put in the way of a right University development *overseas* by that *English* precedent of 1836. "Historical reasons" for other people are not always the right reasons for oneself, and "reasons of policy" must differ with institutions and their histories.

I also do not forget that Principal Childs, of Reading, in his authoritative essay on "Universities and their Freedom" has said practically all that I could say, and more. But I had not the advantage of reading the essay till after my paper was printed. The same is true of Mr C. M. MacInnes's article in the *Fortnightly* for October 1923—a good piece of work by a younger scholar. I should like to ask those who do not know these essays to read them and correct me by them.

A tribute to London in Principal Childs's series of articles called "The New University of Reading: some ideas for which it stands," has my respectful concurrence. He says: "This examining University [London of the Victorian epoch] supplies a real need . . . it would be unfair not to acknowledge that [it] though at war with all historic precedent and open to many grave objections, has nevertheless played the part of nurse to all the modern English Universities and University Colleges."

Principal Childs says "Modern *English* Universities," and he speaks, as ever, precisely. The examining University idea has played almost no part at all in Australia and, according to the New Zealand University Commission, a harmful part in the latter Dominion. The whole point of my argument is that *English* conditions of the Victorian epoch especially and Dominion conditions of to-day differ so widely that while the Dominions must base firmly upon English University traditions, they must not suppose that every precedent is applicable. I have spoken of a country that is wholly British in population,

and yet so remote and different from Britain that what is right here "for historical reasons" and for "reasons of policy" may be quite wrong there. Please try not to misunderstand me.

Suppose I bring you £1,000,000 and ask you to found a brand-new University in a county of 200,000 inhabitants but, so far, without a vestige of a University. Will you do it? I think you will not. That is not the English way. Your way is the way of "slowly broadening down, from precedent to precedent." Your way is the way that Reading has taken—a way that stretches over strivings, and testings, and winning of gradual recognition, for a generation or two at least. Now our Colonial way is necessarily different—a State-subsidised way—a rather hit or miss way—a go at it and get it done way. Suppose I should offer that million to any town of Reading's size in Australia—it would be taken, and the Government would never think of refusing the necessary Act of Parliament. There you have one reason why the Examining University of London was a useful nurse of Universities in England, and why need of such a nurse has never been felt in some Dominions. Universities in Australia are born with teeth and beards, and all the rights of manhood, by will of their parent the State.

Thirdly, I should like to add a suggestion that you may think paradoxical. I have long believed that London could think and act more imperially than it does, even by its "Institute of Historical Research." It has been the Examining University for England, and it has become a vast teaching University. It is to continue its examining function. Might it not extend that to the whole Empire, not spasmodically as in the past, but of settled policy and to the full extent that it deems proper? It could ask, for example, the Australian Universities to receive its syllabuses and distribute them to those wishing to become its external students in Australia, and then to receive its examination papers, supervise its examinations locally, and assist in any other way required, perhaps gratuitously. There would then be one standard for the Empire in external degrees, one class of external degree, and freedom for the struggling Dominion Universities to perform that heavy duty from which they dare not take their attention and for which they have never sufficient resources—the duty of bringing "face to face, in living intercourse, teacher and teacher, teacher and student, student and student." To add the duties of an external system of any magnitude to the old and everlasting duties of teaching and research is to break the back of the Dominion colt or to rob him of his pristine strength and vigour. But the broad back of the

stout old London steed from which Reading has just gracefully jumped, and is not to be the last to leave, is spread for incomparably heavier loads and may bear all the remaining weight of externalism, if it will.

Fourthly, I wish to quote the unanimous opinion of the Conférence of Australian Universities in 1922 on the subject of special treatment of country students whose interests the State that subsidizes the University is naturally desirous of serving, if necessary with special grants.

Resolved:

- (1) That the Conference believes no student can obtain adequate benefit from any University course without attending lectures, without having the advantage of constant use of the library and other educational equipment of the University, and without taking part in University life.
- (2) That new regulations to favour a class of student which finds serious difficulty in attending the University should be carefully safeguarded, so as not to create inducements for others to abstain from attendance.
- (3) That whenever an external examination for a degree has to be conducted, it should not include professional or scientific subjects, neither should it waive any of the regular oral or practical tests.
- (4) That the aim of the Australian University should be research, teaching, and the provision of a good community life for its students; and that the function of examining should be treated as incidental.
- (5) That for students whose circumstances do not permit of their attending University lectures, a system of resident exhibitions or bursaries should be provided by public or private benefaction, and, perhaps, especially by local authorities.
- (6) That if a scheme of external studies is found to be necessary to meet the needs of a scattered population, or for other reasons, it should be regarded as definitely a transition scheme; that the aim should be to secure that all who are fitted to profit by University studies should be put in a position to attend University courses and to take an adequate part in the general intellectual life of the University.

SIR ALFRED HOPKINSON, K.C., M.P.: I should like, first, to congratulate the management, secondly, the audience, and

incidentally the speakers on the strict rule laid down that speeches should be confined to ten minutes exactly. It gives me the greater satisfaction because it enables speakers to think about what they are saying, and not whether they have spoken too long. I hope the example set here to-day will be followed in another place. An observer who has attended another great assembly at two separate periods and knows it from inside, is firmly convinced of the fact that British democratic government will perish under the weight of the verbosity of its representatives unless some such rule be laid down.

I shall confine what I have to say to the Universities with which I am personally acquainted. What has been said already by the representative of Australian Universities shows how unwise it is to attempt to lay down general rules apart from the special conditions of the place in which they are to apply. I shall confine what I have to say to the English Universities and one other University of which I had an opportunity of seeing something when acting as adviser twelve years ago—the University of Bombay. What I have to say may apply to others, but I know much less about them, and I must hurry on to allot the five heads under which the relationship of the State to the Universities may be treated, giving one and three-quarter minutes to each of the five.

First comes *initiation*. With regard to that, I think it is quite certain that in a short time, when the history of the Universities (especially of the new ones) is written, we shall find the exact opposite of the truth laid down by the historians. We shall be told that the modern Universities in England grew up, according to the statement of the historian of the future, owing to the action of a great statesman who got a University founded by prompt and energetic action at the end of the last century, which other people have imitated. As a matter of fact, the real initiation of Universities has not been and should not be due to action by the State. What the State can properly do is to recognize something already existing which has grown up independently of State action. If we look back on the history of our Universities, with one marked exception (Oxford), which I still believe was founded by Alfred the Great in the ninth century—that is an article of faith in which I have been brought up, which I do not intend to give up, though I do not seek to impose that faith on others,—but taking all the others, we find in every case that there was in existence before the University Charter was granted an institution which was doing University work; and the great point established by that is that you may have the highest class

of University work without a degree-giving machinery at all. That is something which may come afterwards. Taking one institution—the University in Manchester—if we want to find out what its work was before it had any formal recognition at all, I would merely say in Cambridge, and in this room, “Circumspice.” There have been bright examples of the product of that old Manchester college in your University here.

Initiation, then, is not the work of the State, and I hope never will be in England, and is only partially so in India. It is sometimes thought that higher education in India has been almost wholly the work of the State. Taking, however, the University of Bombay, we find that its constituent colleges were started really by private action as a rule. It is not true to suppose that that University is not doing a great deal of good work, though perhaps sometimes on wrong lines. The existence of most of its colleges was due in most cases either (1) to missionary effort, as, for example, in Wilson College (Presbyterian), in the College of St Francis Xavier (Jesuit); or (2) to the initiation of liberal-minded Indians who gave large sums of money in order to found various educational institutions which have done good work and, under different conditions, might do very much more in the future. Initiation, then, is not the business of the State. If we ask what is the real origin of Universities, they cannot do better than say with Topsy, one of the wisest persons that ever lived, “I ’spects I growed.”

The next point is recognition. The formal incorporation of any institution and the grant of the power of giving degrees should always be in the hands of the State. I think it would be a most unfortunate thing if any University were to have this power without express authority of the State, which may and should lay down in its charters certain conditions with regard to the exercise of this power which is only subsidiary as a rule to the real main purposes of a University. This has been done in the charters of the modern English Universities. Having had much to do with the drafting of such charters, I may say that the State, acting through a judicial body like the Privy Council, has always been ready to take a liberal, broad, and sound view (which means, of course, our view) of the matters that came before it, and I should like to express acknowledgment from the Universities, having seen it from the inside, of what the State has done in this matter. We have never been unfairly fettered, and, if there have been any cautions or limitations of the powers they conferred, they were wise provisions for ensuring a high standard in the giving of degrees.

I may also mention that it is very important to have such State recognition in other matters as we have had from time to time, *e.g.* in the early exemption of Universities from the Statute of Mortmain. I hope the time may soon come when it is clearly recognized that it would be a wise course to free the Universities, which must use their money for educational purposes; from liability for income tax.

Hurrying on to the question of support, it is clear that our Universities do now require some State support, having regard especially, the Chancellor has already pointed out to-day, to the enormous increase of the cost of scientific education. I trust, however, that the Universities will never be mainly dependent on State support. The State support given for many years to all the Colleges out of which six or seven modern Universities have developed has been important, but not the main part of their principal resources. Taking Manchester as an example, when State support was first given to Owens College it was a good deal less than one-tenth of the total income. £25,000 was for many years the whole of the State support given in the aggregate to all the University Colleges. I trust it may be recognized that it is far better not to be too dependent on the State. Let us look to private benefactions supplemented by local support given by municipal authorities. Speaking from experience, there is no better way of awakening interest in the Local Authorities than by getting them to contribute to Universities in the districts in which they are placed. I hope that support will continue and spread.

We then come to control, which is the fourth heading of State relationship to the University. On this heading we can lay down the clear proposition, now I believe definitely recognized, that there must be no control whatever by the State over the Universities in conducting their work. I do not mean by that that you should never have any reforms carried out by the action of commissions, but with regard to the working of the institution no continuing control whatever. That I trust is now established. If I venture to draw the curtain aside as to what occurred some years ago on that point, there was a great peril at one time when we asked for increased support from the State that the expenditure of the money granted should be controlled by some department of the State. The wise action of the then Chancellor of the Exchequer, who had the matter in charge at the time when a large increase of the grants was asked, ought to be acknowledged. Deputations representing modern Universities—a large one at first and then a small one

which fully discussed the question with him—were received by the Minister with his officers. We asked for a largely increased grant and no control. The official view appeared to be, "Shall we give all that money and have no control?" The Universities did not hesitate or attempt compromise but distinctly said, "That is exactly what we do mean; no one but ourselves can have any idea of how that money can best be spent from time to time. The doors are open, and if we make fools of ourselves you can take it away. Inspect freely, but there must be absolutely no control." The Minister adopted that position subject to a very wise provision (grants have been again increased adopting that provision)—"We should require that that money is to be spent for the development of the real work of the University and not for any fancy fads or mere luxuries."

I do not say that grants may not be made from time to time, non-recurrent grants for special objects, but for general work absolute freedom is the only thing possible, the money must go to the development of the work of the University in the way its authorities consider best.

The Minister also laid down another sound principle, that in distributing the grant regard should be had to the local efforts made by each, and the support given in other ways.

Then we come to the other side of the shield, the question of service. Here it is a question of the services to be rendered by the Universities to the State. We have had an ideal presented to us on this side in the remarks made in his opening statement by the Chancellor to-day, and those who have had to do with University administration will recognize their truth. Co-operation between the State and the Universities has been carried on with considerable success in various lines. It has grown in recent years, and might well be extended. At the time I had to do with University representation I have seen this co-operation (which is quite another matter from control) between the State departments and the University grow stronger from year to year. Take research, for example, it is not a question of the State saying simply: "We will give so much money for conducting a certain branch of research." They suggested at one time, We will give you so much a year if you will tell us on what specific research you will spend it, and how, and tell us the results. My scientific colleagues did not see it in that light, and we ventured to express their views to the powers above. Freedom in the methods of research is essential and appears now to have been secured.

Finally, with regard to service, the Universities must always

remember their primary objects—which are, and I hope always will be, first, to raise up a due supply of persons fitted to serve in Church and State; and, second, to advance knowledge by researches carried on in their own way with mutual assistance; and such research must not be confined to physical science.

As examples of fruitful co-operation in recent times may be mentioned the fact that from time to time the Universities can supply men for specific posts to the State. Good results have followed and may still be obtained by the development of the system adopted for some time in connexion with one of the Oxford Colleges when its Head recommended for important positions under the State men whose characters and capacity he really knew. Those who know what young men they select are really capable of, and who will give disinterested advice, will be able to say which man is suitable for a particular job. Another example was seen more conspicuously during the War, when the State applied directly to the Universities and took a number of experts for some particular work, or to carry out some special research. We had examples of that in aircraft, in chemical research, in marine work, in the Intelligence Department, in economics, and in other branches requiring special knowledge. The State, in times of special stress, in times of transition—in the economic field as well as in the field of science,—has applied to the Universities again and again for persons able to give useful service. That help has been given, and with great advantage to both sides. We may be sure that the policy of no control but full co-operation is the right one to be pursued in the future.

SIR THEODORE MORISON (Armstrong College): I think what has been said already is a sufficient indication of an apprehension among representatives of the Universities in this country that our Universities might become too dependent upon the State. I believe one of the reasons for selecting this as a subject of debate is that we hoped that the representatives of the Universities of the Dominions and of India would be able to tell us whether that fear has really been justified with them. We are aware that they depend very much more than our Universities in this country do upon assistance from the State, and I should like to know whether they have found in practice that that fact does interfere with their liberty. Do they find that the *ingercence* of the State upon University matters is working out to harmful results? I venture to say that I am a little sceptical of this fear of the State. When a University receives money from any source whatever, it is to a certain extent under an

obligation, and there must be danger, whoever the benefactor may be, whether the State or a Local Authority, or even the individual millionaire, that the University's policy may be warped thereby. We have heard stories (but I cannot vouch for their truth) that in American Universities the influence of the millionaire benefactor has already made itself felt in undesirable ways. We who belong to the modern English Universities to which Sir Alfred Hopkinson has referred know that there is a danger of undue influence from the Local Authority. Therefore, it seems to me, that, from whatever source the University receives money, there is that danger of undue influence and undue control over its purely academic decisions.

I feel quite sure that the only way is for the University to stand up courageously either to the State or to the Local Authority, or even to the benefactor, and tell him that the gift can only be accepted on condition that the University retains complete autonomy.

I do not believe that the doctrine will be found unacceptable, but the Universities must have the courage to state it, and they must occasionally have the courage to refuse benefactions. If that is done, I do not believe there is any danger from any of these sources; but, if there is danger, it can only be met by frankness and courage on the part of the University concerned, who must say that it will not accept money except on the condition of complete autonomy.

I hope the representatives of the Dominions and of India will give us their experience of their greater dependence on the State than we have knowledge of in this country.

SIR P. C. RAY (Calcutta): I did not come prepared to speak on this subject, but as I find our High Commissioner (in whom I recognize one of my former pupils) is absent and some other members too, I venture to appear on this platform where I consider it a great privilege to be allowed to say a few words.

In 1912, at the first Congress of the Universities of the Empire, I was called upon to address the assembly, so I am not in a strange position, and I believe our present Chairman himself presided on one of those occasions.

My principal object in speaking to you to-day is to present to you our unfortunate position in Bengal. I hope the weighty words of wisdom fallen from the lips of your honoured Chancellor will receive due and careful attention at the hands of the Government of India as well as those of Bengal. You know how the political reform of 1919—the Montague-Chelmsford

scheme—has affected the Universities of India, specially that of Bengal. The Universities having been provincialized by that scheme, when we of the Calcutta University ask the Government of India to help us, they refer us to the Government of Bengal; while the latter in its turn takes shelter behind the Meston award. We are thus between the Devil and the deep sea. As for private munificence for research work we have a splendid example of it in the Bangalore Institute of Science, which owes its existence primarily to the generosity of only one Indian—the late J. N. Tata of Bombay. Bombay is the land of millionaires; though nothing compared with it, we in Bengal have not been entirely barren. Two of our distinguished citizens, the first being Sir T. N. Palit, who gave away 15 lakhs of rupees shortly before his death, which would represent £100,000 sterling. He was only a lawyer and had to deprive his children of their ducs to do it, for he practically gave everything he owned for the foundation of the University College of Science.

He was followed by another distinguished citizen, also a lawyer, the late Sir Rash Behary Ghose, one of the foremost and most talented men in forensic life. He gave away £150,000, practically everything he owned, for the benefit of higher education in science. We have had every help from the Indian quarter, and the College of Science represents 60 lakhs of rupees or £400,000.

But here comes the tragedy of the whole thing. Whenever we approach the Government of India or the Government of Bengal we are told there are no funds to spare, though when other grandiose imperial schemes arise the money flows in. I have had occasion to criticize the niggardly parsimony of our Governments. We are treated as so many *Oliver Twists*. I can only hope that the weighty words we have heard will be broadcasted and even sent by Reuter—at any rate a summary of it—and by the next mail the whole of the subject will be sent to the papers and will be read and digested in every part of India, because it is a most important part of the British Empire, and there is no reason why the cultivation of the higher branches of science should not be pursued there as zealously as anywhere else.

I would especially draw attention to one fact. The great Indian nation which I represent was once pre-eminent in the glorious days of the past. The Hindu has great potential abilities, and this great University, hallowed with the traditions of ages, does not need to be told that. It has ample proof of the Hindu intellect and what it is capable of if properly

encouraged and nourished. I have only to cite the influence of Paranjpye Ramanujam and Jagadis Chandra Bose—both of whom were in the Seminaries on the banks of the Cam. If the Hindus had done nothing else but to present the Western world with the symbolic notation and with the Arabic numerals, for they are not Arabic except that the Arabs acted as intermediaries—Max Müller says that if the Hindus had done nothing else but present the European world with the symbolic notation and Arabic numerals, the debt of Europe would have been unrequitable.

I consider I have a double right to speak from this platform. First, not only because I have spoken under the auspices of the great Chancellor of this University, but because nearly half a century ago I was for six years at a stretch a student of one of the great Universities of the North of which your distinguished Chancellor also happens to be Chancellor; so, to use the language of a chemist, I would say that I am linked to him by double chemical affinity.

I hope that the Government of India, or that of Bengal, whichever it may be, will now come forward and give us substantial help for the University College of Science. I have calculated that we have received 2 per cent. help from Government and 98 per cent. from our own people.

MR HUGH RATHBONE (Pro-Chancellor, Liverpool): I had hoped that the challenge which Sir Theodore Morison threw down might have been taken up before I was privileged to speak, but, as we have not yet heard whether the Dominions do or do not fear in the future undue influence by the State, I may say that we all agree emphatically in this country with the strong pronouncement of Sir Alfred Hopkinson that we will have none of it.

I believe Sir Theodore Morison is correct in saying that there is some danger of getting control from either of the three kinds of donors. Taking the one of which there is least danger, the private benefactor, that danger, it seems to me, is only in the initial point, and if the University has the courage—as the Universities of England have had the courage—to refuse gifts from private donors to which conditions are attached, then that danger is eliminated, with this one exception, that if, by any chance, the money given by a private donor is given for general purposes and is not allocated to either professorships, or buildings, or something which is finished with, there is a possible danger that the private donor may say, You ought to divert

some of my money to another purpose. Some of the modern Universities have had experience of this.

That leads to the point on which I wished to speak. While the control that the municipalities and State have so far exercised over the Universities is nil and has in no way interfered with their development, it is conceivable that in the future things may be different and that, at some future date, the Parliament of this country may say that the very large sum which is given yearly for the general upkeep and development of the Universities should be under State control. Therefore I suggest that the next time we approach the Government for further aid we shall ask, not for a yearly grant, but for a grant which, if the Government prefers, may be spread over years, intended as a capital grant. Once that grant has been determined, the State can give it either in one lump sum or, if the Chancellor of the Exchequer prefers, over a period of years, but nothing would enable the Government to control its destiny. Most of the modern Universities have asked for yearly grants, or for grants assured for five years in order that there might be frequent opportunities of revision, but seeing that many of the Universities now receive a large sum from the State and in many cases from the Local Authorities also, the time has come when we should be wise to persuade the Government to give us in the future grants available for capital purposes.

May I repeat that I hope Sir Theodore Morison's challenge will be taken up.

DEAN MCKAY (McGill University): I am inclined to think that perhaps the subject for discussion this morning may appear a little ambiguous to some of us. There is, as you probably know, in each Province of Canada, excepting the two Franco-Scottish Provinces of Quebec and Nova Scotia, one of the State Universities which have been referred to this morning, that is to say a University which has been founded, built, and maintained exclusively from moneys taken from the State Exchequer. As I happen to have lived a great many years all along the long cold corridor called Canada I am pretty familiar with all these State Universities, and I venture to say that I have never known a provincial Government to have seriously interfered with the autonomy and initiative of these Universities. There may be a silent influence, an unspoken influence, which perhaps plays a little part, but I do not think it is appreciable at present.

For instance, I am very familiar with the conditions of the two new Universities of Saskatchewan and Alberta, and I think

that I may safely say that these two Universities are as free as any Universities supported by private benefaction. The money is handed over in a lump sum to a Board of Governors, a non-political body, who administer it.

But it is not in this sense that we understand the problem at McGill, because McGill is supported exclusively from moneys derived from private sources excepting that the Government of the Province is always a handsome benefactor when money is needed. We understand this problem to mean what the University can do to influence, of its own initiative and freedom, the life and work of the community, and perhaps more especially that complex organization of official responsibilities which, in the more technical way, we call the State. That is the way we understand the problem at McGill, and stated so. The problem is acutely appreciated in all the Provinces of Canada and in all the States of the American Union.

Will anyone attempt to imagine, for example, what the 130 millions of people who have come from the Continent of Europe to North America during the last century and a half would really look like if it were not for the Schools, the Universities, and Colleges? With us the School is the State. It is not from the terms of the American constitution nor from the terms of the British North America Act, 1867, but from the little red schools on the hills and the plains that the secret of America can be learned.

The system, the plan, as you know, came originally from Scotland, and it may be doubted if any small nation in modern times has ever made any equally great and noble contribution to the whole of human history, and the end is not yet. In some of these schools the standards of education have been low—very low indeed,—but that is only to say that they began where they ought to begin—that is, at the foundation. I do not believe that there is a meanest, narrowest sectarian College in all the land which could not justify its endowment. We have, you see, been straining every nerve to deliver the whole community from gross ignorance. The principle is to offer an education to all—and I do not imagine that from that article of our faith we shall ever depart, and least of all in a new country like Canada.

Nearly all our problems come from this principle, such, for example, as the great increase in the number of students attending the Schools, the overcrowding of class-rooms, the multiplication of teachers, the foundation of Normal Schools and Colleges designed to train the teacher to teach well the little he knows

about the subject he has to teach, the abuse of the lecture method of teaching to large classes to the prejudice of that finer scholarship which comes from personal friendship between instructor and student, and all that elaborate machinery of pass marks and educational measurements by which education in Canada and the United States has become so heavily encumbered in recent years. Even our highest grade of post-graduate education originally came from this same motive. Post-graduate work was started in the American Universities in the first case almost wholly for the purpose of training men and women to be instructors and professors in other Colleges and Universities. That is the pedagogical Ph.D., and, if you understand that, you understand almost everything that is distinctive about this class of work in Canada and the United States.

In recent years, however, this post-graduate work has greatly outgrown its original design. By far the largest number of graduate students are now preparing themselves to take up technical positions in scientific industries, so that in this way the Universities have been robbed in a measure of their possibilities of recruiting their own professors. For instance, the Bell Telephone Laboratory in New York employs 3500 people in one building who are engaged exclusively in scientific research, and 550 of these are doctors of one kind and another. And some of them the very highest authorities in the world in their several subjects of research. The curious thing about it, too, is that it pays.

The problem of the State University with us, then, is, How can we carry this advanced work of the University along a little further so that the Universities may set themselves to the task of preparing men of broad academic training for the service of the State in our numerous public offices. The need is great in Canada. I should like, indeed, to tell you something of Canada just at present. Is it not astounding how a whole nation, a whole empire, can become perturbed over a fine point in technical constitutional practice, especially when both of the belligerent parties are technically wrong? The difficulty with our Government in Canada is that we have never made any adequate provision at all for investigation, research, or impartial criticism of any kind. We have left that alone, so that a machine we borrowed half from the Motherland and half from the United States has been running without anyone to do a piece of repair work if it should get out of order. In any case it is clear that the Governor-General of Canada, Lord Byng

of Vimy, has not in the slightest sense contributed to the crisis that exists in Canada at present. The future solidarity and success of this great Empire will depend almost altogether on educational agencies and scarcely at all on constitutional or commercial agencies.

International or imperial psychology is always a sombre subject. The instincts of men in the mass are usually bad. It would seem that it is impossible for the gentle sentiment to exist between any two big corporations. I have never known two nations to love one another. We have all known many nations to hate one another, even until death. The only exception to that on a grand scale is the British Empire, because, after all, there is a great mass weight of friendship between the people of the overseas Dominions and the people of the Motherland, and between the people of the Motherland and those of the Dominions. So true is that, that it is literally true to say that there is not a single individual human unit in the whole of Canada who does not feel a distinct friendship for every single individual unit in the Motherland, and I am sure that is true of the Motherland also. Here, then, is a great mass weight of human material out of which we may carve a new contribution to human history if only we have the courage, the knowledge, and the skill to do it. That, as I understand it, is the meaning of this Congress.

PROFESSOR PAYNE (Melbourne): Melbourne University will support what has been said by the Professor from Sydney, but at the same time we feel very strongly that State interference is a possible thing which we have to guard against practically every year of our lives. We have to look out for the sapping of our independence. Some years ago there was a case of the Cabinet offering us a professorship and coupling with the offer the name of a particular holder. The University Council quite rightly turned the offer down because, they said, "We must choose the best man available. Your nominee may be the best, but we must be left free to choose." To-day, after a few years, we are glad to see a new school attached to the University, and the Professor appointed to it by ourselves is actually in this room. This is a thing, then, that we have to guard against—dictation in regard to the appointment of certain individuals.

There is a very important matter in which the University might be helped very materially by the State. The State might free all gifts and legacies from income-tax and death-duties.

If that were done, it would be a distinct encouragement to the private donor to help the Universities. The State might even go farther and say, "We will supplement any private endowment." This has been done (and I am sorry that the Professor from Sydney University did not quote it) in two particular cases in connection with Sydney, where a large endowment was given for a library; the State said, "Keep that money for the library and we will put up the buildings." Further, some years ago £100,000 was left by Mr Russell to endow a school of engineering at Sydney, and again the State stepped forward and said, "We will put up the buildings." If one could only encourage that sort of thing in connexion with our parliamentarians and legislators throughout the Empire we should be taking a step worth taking.

There is another way in which we feel, in Australia, that the State might help more than it does, namely, by opening the higher branches of the Civil Service, both on the civil side and on the professional side, to the highly trained University graduate who is able and capable of doing the work. In Victoria we find that the State is rather inclined to take young fellows from the bottom and raise them up to the higher positions, and so fill up the Service with men who have not had a University career. On the other hand, there are certain departments of the State which are rather more broad-minded and are definitely giving their men time to go to the University to get a higher education. Throughout the Empire the various States would help the Universities if they were to keep the higher positions open, without restriction, to University graduates.

MR H. J. BHABHA (Bombay and Mysore): I did not intend to speak at all at this Congress because, ever since I came to England and have seen her great educational institutions, I have been in a state of amazement and great regret at the very backward condition of the Indian Universities and of higher education in India in general. There the question of higher education and that of State aid of education are so complicated and differ so greatly in different Provinces of India that I cannot make a universal or general statement.

Sir Theodore Morison challenged the Indian delegates to express their views regarding State aid, and I have therefore ventured to speak a few words on that subject. But what is true of Bombay may not be true of other Provinces, and certainly is not true of a small State like Mysore. I represent both Mysore and Bombay, and I should like to put our difficulties

before you so that you may understand to a certain extent what it is that puzzles me.

In the case of Bombay, the Government has never been willing to help the University by itself to any large extent, but it maintained a college of its own and it maintained a department for general education. But in these days of advanced University reform the great necessity for Bombay now is the turning of the University into a teaching University and making the people understand that the University is an asset of the people as well as of the State, and that they should disburse money from their private funds freely to help the work of the University. This education the rich people of Bombay, I am sorry to say, have not yet had. When I think of the princely gifts given by the industrial magnates of Bristol to their rising University I feel the sort of admiration which puts me, as a Bombay man, to great shame. Bombay to the outside world has the appearance of a rich city; it has the appearance of general munificence in various ways, especially in gifts for the prevention of disease, the foundation of hospitals, and so on. But where education is concerned the people have proved themselves to be hard-fisted, and the University has struggled on as an examining University for so many years with a pittance of 10,000 rupees a year from Government, which is equivalent to £700 a year.

While this is the state of things in Bombay, in Mysore there are other peculiar difficulties. In Mysore the people are essentially poor because trade and industry are at a low ebb and the means of obtaining wealth, or even subsistence, are not very many. The result is that though there has been great enthusiasm for the foundation of a University, there are not many rich people who come forward and endow it; in fact there have been no endowments except petty endowments for prizes and scholarships, the latter being of small amounts which do not affect the University very much. The Mysore University is entirely dependent upon the State and the Maharajah and his great sympathy with the people. There has been a great outcry for higher and higher scientific education, for laboratories which would cost enormous sums, and such like improvements, but there have been no endowments worth mentioning, and the burden on the State has become almost insupportable. A small State with a limited income has very many duties to perform, so that the question debated to-day is closely connected with the duties of the State in other directions besides education. How much should a State spend to provide for higher education?

What proportion would be appropriate? These would be natural questions to ask in the case of a poor part of India.

That question would lead to a discussion of Government policy and perhaps is too wide to be dealt with in a few minutes, but all I can say is that, while no natural talent should be prevented from developing if there is a natural desire for knowledge, and while every effort should be made to conserve and encourage intellectual gifts which may lead to the good of the country, yet there are more and more difficult questions regarding the development of wealth, the sources of food, trade, and industry, which should not be neglected, while the passionate demand for education—higher education—is allowed to go on without check or hindrance. *

You may have heard an exaggerated story—I hope it is exaggerated—of a man in India who took a high B.A. degree and also an LL.B. degree, a married man with several children, who went about begging in Bengal for a place at ten rupees a month—less than £1.

What suits a country like America, or Canada, or England, may not suit India, and these are questions which have to be thought over by politicians on whom the duty of laying down a policy in matters of higher education falls. I merely say these few words regarding the difficulties we feel in India in order that the rich people of England or of other more flourishing Dominions may not be carried away by the idea that India must go forth unchecked in the matter of higher education without reference to other needs and other means of bettering the condition of the people.

SIR HENRY SHARP (Delhi): I desire to correct a possible misunderstanding which may have arisen, or may have been conveyed, I am sure perfectly unintentionally, by the words of a previous speaker. When listening to Sir P. C. Rây, had I not known the facts I should have imagined that the University of Calcutta—a very large and important institution which a few years ago counted 28,000 students on its rolls—looked not in vain to private benefactors for support, but utterly in vain to the Government, and that he referred both to the University and also to the Chemical Institute which is part of the University.

I do not know how the University has recently fared from the hands of the Government of Bengal, but when the University of Calcutta and its ancillary institutions looked to the Government of India for aid, they certainly did not look in vain. Beginning from the time of Lord Curzon, the Government of

India in ever-increasing measure gave assistance to the University of Calcutta in various ways—by capital grants, by instituting professorships, and by large recurrent block grants. When the charge of the Calcutta University was transferred from the Government of India to that of Bengal, those charges on the public chest were likewise transferred and proper adjustment made in the new provincial settlements. I think it most unlikely that the University of Calcutta has lost any of the money that it then received. If so, I am sure that many who are here, myself included, would undoubtedly have heard of it.

SIR MATTHEW NATHAN (Queensland): I want to say a few words on behalf of the University of Queensland in reply to the remarks of Sir Theodore Morison.

The Queensland University is a new one, established within the last thirteen or fourteen years, and it is mainly supported by the Government. The Government is represented on its Senate by a certain number of members, of whom I was one, and representatives of primary and of secondary education also. But in no other way did the Government attempt to control the work of the University. I do not remember a single instance in which its freedom of action was in any way interfered with by the Government or by its representatives collectively.

One other point in regard to the Government support of that University. A similar case of support has already been referred to in connexion with Melbourne. The Government did its best to encourage gifts for research by passing an Act which gave a Government contribution equal to any that might be derived from private benefactors. In one sense the private benefactor is more likely to control the work of the University than the State. The private benefactor often presents comparatively small sums allotted to distinct purposes, and, in so far as these distinct purposes affect the curriculum of the University, then that interference must be greater than that of the State which gives large sums without any stipulation relating to their apportionment.

PROFESSOR RADHAKRISHNAN (Calcutta): I did not intend to speak this morning on this question, but some statements were made with regard to the relations prevailing between State and University so far as India is concerned, and my fellow-delegates have asked me to say a few words on that subject.

In this country there is some suspicion in regard to State interference with education. In India that may be a thing of

the past. The Indian Universities were organized by the British Government, but the general policy of the British Government was determined by the theory that it is the duty of the Universities to make the Indians English in tastes, temperament, desires, etc.—in all except colour. That policy succeeded to a large extent, and now and then we have instances of men who urge, "We should all have England for our mother, and Greece for our spiritual grandmother." Naturally, however, it was felt to be difficult to borrow souls, though it is easy to barter goods. As the Indians were developing an unnatural accent, a halt was called. But that was the general policy of education carried out by the Universities themselves which came in for criticism. But now you will see that that was a real advantage to India herself in some ways. She has been able to play some part in world affairs on account of the education given at the University, yet it was necessary that words of caution should be spoken. It was necessary that the Indian Universities should have a larger measure of autonomy than they actually possessed. The dangers of a democracy are as great as those of an autocratic State.

In the Council we have questions about academic matters, and the professors and teachers themselves are controlled by what is talked about on public platforms.

I believe the progress of the Indian University lies in its getting the money from the State, and being allowed complete autonomy as far as its inner development is concerned; and if that policy is accepted, the present suspicion of State interference will become a thing of the past.

I desire to express, on behalf of the Indian delegates, their satisfaction at being able to have a word in this matter. I believe the British Empire is bringing together the East and the West; but India stands for a different culture altogether, and if the problems that stand between India and Great Britain can be settled amicably it would be a help towards world unity.

MR LITTLEHAILES (Madras): The debate, up to now, has followed the line of direct control by the State of a University. I wish to make a few remarks upon the indirect control which the State might exercise over a University, and especially in one particular regard. It so happens that in some countries, *e.g.* Great Britain, we have a system of Civil Service Commissioners who select candidates for the public services of this country. In other countries there is no such system, or only an incomplete

system of public service commission which selects candidates for the public service.

In these latter countries (and India is one of them) the Government accepts for posts in Government service qualifications which are laid down by the Universities. The State may take up the attitude that a matriculation standard of examination reached by a candidate is sufficient qualification for entrance into certain branches of the public service, or that an intermediate qualification, or a degree qualification is necessary for the admission into the public service. Such a practice imposes a certain amount of indirect control on the University, and it appears to me to be an open question whether a State ought, in justice to its Universities, to accept University examinations as the necessary qualification for admission into the public service.

In India we are very often told that the Universities are overcrowded. Much public opinion in India is brought to bear upon the Universities, and there is a very strong desire (due to reasons which I will not enter into now) evinced by the majority of educated persons in India to enter Government service. The pressure of public opinion is said, therefore, to be brought to bear upon the Universities with a view to making the qualifications obtainable as easily as possible. If that be true, it must result in a depression in the standards of the University.

In India, then, we have this opinion held by a certain section of thoughtful and educated people, that the fact that the various provinces can in general only accept certain University qualifications as admitting to Government service helps to fill the Colleges with students who are not altogether fitted for a University education—students whose main idea is not the cultivation or pursuit of knowledge as an end in itself, but whose real desire is to obtain a qualification for entrance into Government service. It is believed that the Colleges have a certain number of students filling places, and thereby preventing other students who are more fitted for University education from obtaining it.

In conclusion, I would stress the point that there is a great danger of public opinion being brought to bear on the Universities in order to make their examinations easier by depressing their standards.

TUESDAY, JULY 13—Afternoon Session.

CHAIRMAN:

F. W. PEMBER, D.C.L., WARDEN OF ALL SOULS COLLEGE,
OXFORD.

“The desirability of establishing in London a School of
Advanced Legal Studies.”

SECOND SESSION.

THE CHAIRMAN: My Lord Justice Atkin, Ladies and Gentlemen; whatever mistakes I may make as Chairman, I feel I can make no mistake in expressing my great personal regret in having to address you now instead of Lord Cave who had hoped to be present here to-day to take the Chair. He is very sorry to have to disappoint us at this late hour, but it has become necessary owing to the proceedings last night in the House of Lords. This has been conveyed to us by his secretary.* But Lord Cave has not left us without witness of the interest he takes in our proceedings because I have here a letter in his own hand, which I will read to you:

HOUSE OF LORDS, S.W.1,
10th July 1926.

DEAR SIR,—I greatly regret to find that it is necessary for me to be on the Woolsack on Tuesday afternoon, and accordingly that I shall be unable to preside at the afternoon session of the Universities Congress on that day. I am the more disappointed as I am much interested in the subject which is to be discussed on that afternoon, and was looking forward to hearing the views of the distinguished men who are to speak.

Please express to the members of the Congress my very sincere regret for my unavoidable absence.

Yours very truly,

CAVE.

Alex Hill, Esq., M.D.

I know that I shall only be expressing the feeling of all here when I say how deeply we regret that the Lord Chancellor, the Chancellor of my own University, is not able to be with us to-day.

Having regard to the very rigid time limit assigned to the speeches of those experts who are to address the various sections of the Congress, I feel it is incumbent on a Chairman to ration himself even more severely than the duly constituted authority has done, and so I do not propose to detain you for more than a minute or two while I give utterance to two propositions which, I hope, will not contain anything that can be supposed to be controversial.

Most of us here, including those who are followers of the Common Law on the other side of great stretches of water,

have taken sufficient interest in the history of the Common Law of England to know very well that London was once, and that for some centuries, the site of a great University of legal teaching and research. That system of legal teaching and research foundered in the troublous days at the end of the earlier half of the seventeenth century, and somehow or other that great University of Law, as it was then the fashion to style it, has never to this day been revived in its full and all-embracing form. There have been, and still are, agencies for the teaching of law in the Metropolis—the Inns of Court and the Solicitors' organisation of the Law Society, and there is the Law Faculty of the University of London, but except in so far as the University of London has been to some extent, and worthily, an Imperial University, the teaching of law in London has not reached out to embrace all the borders of the British Commonwealth of Nations. That, of course, is what we are all here to discuss to-day, but I cannot imagine anyone reflecting on the fact that we once had a great University of Law in London, without having the desire for an even greater University which should embrace and cater for, not merely the original Common Law of this country, but the whole body of legal research and teaching so far as it extends over the Commonwealth of British Nations.

We shall all of us, from whatever angle or facet we approach this discussion, feel that it is extremely desirable to preserve, utilise, and gather up into an Imperial School of Law whatever agencies already exist. It is to be hoped that the Inns of Court, the Law Society, and the University of London with its constituent colleges, may be able to contribute very powerful aid to the working of this School of Law.

And now, having completed my task, I will say in the words of the Psalmist, "Eructavit cor meum," and I call on Mr Justice Greenshields, Dean of the Faculty of Law in McGill University, to address you.

Discussion.

MR JUSTICE GREENSHIELDS: I hasten to assure you that I am not responsible for the fact that the Biblical injunction as to the serving of wine has been manifestly disobeyed in the present case. However, my service will be such, I fancy, as will enable you to appreciate the better service which is to follow. At the same time and at once I wish to express personally the pleasure I have in being present in what I may call the secret hall of Cambridge, and I appreciate in the highest degree the honour that was done me and the Faculty of the University from which I come, and even the Province from which I come, in allowing me to open this discussion.

I have already, in the paper which was circulated before this meeting, perhaps unwisely, placed myself to some extent on record. It is a wise thing judicially, I fancy, not to give judgment until you have heard Counsel. It may be that I have already rendered judgment in the present case. I wish in the few remarks I shall make to render my meaning as clear as possible and as practical as possible. The question, as I read it, was in my judgment wisely selected by the Committee. I am not curious to find out what the members of that Committee intended to say, but I think I do know what they intended by what they did say.

Is it desirable to establish in London a central school for advanced legal studies? In the first place, I care not the snap of my fingers by what name you call it. You may call it, as has been done, apparently from choice or preference, a School. In the second place, the question is whether or not the establishment of such a school; or institute, is desirable. It is not for me to say in what way that school will be founded or established. It is not for me to say, except in the most general terms, the manner in which that school, if and when established, will be carried on in its activities and operations. But I do know this, that it is difficult to express a desire for something without knowing what that thing is, and to that extent I have no doubt that I am bound to state in the most general terms what I think the thing should be.

I am going to speak from a view-point of the country from which I come. I do at least possess some knowledge of the conditions there existing. I do profess to have some knowledge of what would help or advance the conditions for the individual members of the Bar of the Province from which I come and, generally, be to the benefit of the profession as a whole.

We have in the Province of Quebec what I have often described as a code-ridden Province. I once said so publicly, and such criticism as was offered was kindly criticism. I once said that when the Legislature of the Province of Quebec had nothing else to do it proceeded to make a code. We have our great Civil Code of which we are still proud. It purports to (and does in reality) disclose and set in concise form the whole corpus of the civil law of the Province of Quebec. We have our code of procedure, our building code; we have our school code, and it is said indeed that our beer and wine are bought and consumed according to the rules of a code.

The principal object of the elementary law school in Canada is, and ever must be, to teach the Civil Law. The Civil Law of the Province of Quebec, notwithstanding an impression prevalent even there that it was founded and drawn from the Code Napoleon, dates back long years before the Code Napoleon came into existence. In 1865 a body of men learned in the old French law were asked to prepare a statute, which was passed in 1866 and is now known as the Civil Code of the Province of Quebec, and we are told that the Code Napoleon, though then in existence, was to the codifiers a closed book. They were told to go far beyond the Code Napoleon to its original sources, viz. the old French law—*le droit coutumier* and *le droit écrit*. And you know where they went for this, i.e. to the sources of the French law and, may I say it with fear and trembling, to the source of the common law of England and of the law of Scotland—to the Roman law. Some will not admit this. We have to teach that code, and I freely and frankly admit that it is a more or less narrow teaching. I am convinced—I have been convinced for years—that in addition to that course in Civil Law, to round up the jurist and make him a cultured jurist, he should have teaching on other lines than those of the Civil Code.

When my friend Dr R. W. Lee, now Professor of Roman-Dutch Law at Oxford, occupied the position which I now hold, he saw with vision; and, with some assistance, I am told, from me, he succeeded in establishing a Common Law course in McGill. We gave a degree of LL.B. as distinguished from the Civil Law degree of B.C.L. I say it with no reflection on the teaching staff at McGill—it may be largely due to the fact that Dr Lee had to sever his connexion with that faculty that we were forced to drop the Common Law course. What I desire, and in respect of which I hold up both my hands, is the establishment in London of a School, empire-wide and empire-embracing in

its activities, its purposes and objects, where students from my University, amongst others, having received such teaching for three or four years as we are able to give them, may come to study. After all, if the whole law of the land is not embodied in the Civil Code of the Province of Quebec, I am satisfied that they will learn that our code embodies the fundamental principles of law, which fundamental principles are found in one form or another in every jurisdiction where law has reached a semblance of size. I believe my friends from the other Provinces (what we call the Common Law Provinces) of Canada are in full accord with that. I am not unaware that a letter was published, which was signed by the Dean of the Law School of Ontario, in which he would seem to be of a different opinion. A representative of that School is in this room, Mr Justice Hodgins, and I am authorized to state that he is in full accord with what I have said. Unfortunately, he will not be able to address you, or he would say it in better words than I can use.

Teaching in Comparative Law, with proper teachers to guide the student, would be of immense advantage to him. Remember I am not thinking of the commercial side of this matter. Far be it from me. I am not thinking of the amount of money men could make on their return to Canada as a result of studying in London. That is of no importance to me whatever. What I am thinking of is that we might, as the years pass by, create a body of men, learned jurists, who would return to their native country and, whether they practise or not, they would be able to fill the Chairs in our law schools, and this would react so beneficially upon the general character of the Bar that the advantage would be untold, in my opinion.

I have now only to say this. Do not think for one moment, from what I have said, that we would allow the slightest interference with the presently, to be constituted institutions for the teaching of our law in the Province of Quebec—and I am sure that I may say the same of all the Provinces of Canada, as perchance of the members of the Law Society of London, or members of the Inns of Court, who might fear that we might support a school or wish to see a school established which would conflict with the present existing control of the profession in England. I repudiate that idea with all the emphasis that I can find words for, and express the firm conviction I hold upon that question. No! No certificate from any London school, no teaching however thorough and exhaustive—exhaustive in its nature and in the length of time it takes—would ever be received in the Province of Quebec in replacement of the present

requirements for admission to the practice of law. The University degree amounts to nothing, or next to nothing, so far as admission to practice is concerned. There is a body—I am not approving or disapproving of the system—a body of examiners which passes the students before they are admitted to the practice of their profession. No matter what their standing in the law school, or what degree they hold, they must jump that hurdle, and I assure you there is a big water-ditch on the other side.

Let me conclude with this remark. I am a good deal in the position of an eminent counsel who was before my court not very long ago. It was a lovely day in June, such as we have in Canada sometimes, and the golf course was said to be in excellent condition. This eminent counsel was proceeding with an exhaustive and very able argument when he paused to consult a memorandum. I took advantage of the pause and said, "I fancy, really, that this is about all that can be said upon this subject." Without a moment's hesitation shot back the answer, "No, my Lord, it is not; but it is all I know." Now I know much more that I would have liked to have said, but having exceeded my time limit, I conclude with a further expression of my thanks for your attention and the honour you have done me.

[Vide *Mr Justice Greenshields' paper*, p. 71.]

SIR MAURICE SHELDON AMOS (Judicial Adviser to the Egyptian Government): I remember being told as a young man that Mr Gladstone used to say that the great fault of lawyers in debate in the House of Commons was that they spoke to the whole of the brief, and people only wanted to hear them on one or two points. Therefore I am sure you will highly approve of my intention to touch only on one or two aspects of this big subject.

I would first solicit your agreement on the point that it has been a very happy choice of subject for this Congress, because any such conception as an Imperial School of Law in London is one that can only hope to succeed if founded in very full and close consultation with the Universities of the Empire. My own personal experience of life has been passed in Egypt where we live in an atmosphere of French law, and as a youth it was my business to become a graduate of the University of Paris. I have always been profoundly impressed by the extent to which the Faculty of Law in Paris performs an important national French duty in promoting a better knowledge of French culture throughout the world. There is no more powerful channel of

dissemination through the world than the French Faculty of Law.

There is one point in which I must concede that the French have beaten us. There are twenty countries which have adopted the French law in one form or another, without being French colonies or definitely under the French flag, but from pure love and affection. One of the reasons for that is the great influence, prestige, and authority exercised by the French Faculty of Law. So I should heartily agree that it is very desirable for us to rival them in that respect, as in others. We have a great duty to perform to a large part of the world. London disseminates its influence in countless ways. It is the seat of Parliament, the seat of the Privy Council, the seat of the Inns of Court; and I think we can admit that perhaps we have left a little too long the establishment of a great School of Law in London. But I must call myself to order before the Chairman does so. The subject of debate is not for the moment the establishment of a great School of Law in general. The Chairman touched on the ideal, and I agree that it is the ideal, but for the moment we are only considering the establishment of a school of advanced studies. I venture to think that that can quite possibly be attained.

The contribution I wish to make to this subject is simply an examination. I am not myself immediately prepared with a programme. But I think there are three aspects in which we might view this proposed school.

We may view it as a school of post-graduate studies, as an institute for research. And now I put forward the idea which I think is mine, that you may possibly view it as destined also to take the form of a staff college. As a post-graduate school, we are thinking of a school in which the course of studies would be similar to the course for the doctorate in Paris or Berlin. It would be rather a normal thing for a young man, having a good legal education, to go on to after taking his B.A. degree. I am fairly certain that the school ought not to content itself with that ambition alone, however. Rising, ambitious young men from Canada, New Zealand, South Africa, India, or Ceylon would have a double advantage in attending that school, because not only would they get instruction, but they would be travelled men when they returned home, and their fathers would take that into consideration when advising them to go.

But you must remember the extreme importance of this school not being only a school for visitors. It must be also for natives of this country or you will not realise the ideal. We want to see our fellow-subjects from all over the world mixing with our

own young men. At the same time, I think we shall have some difficulty in persuading our best young men to come straight from their fellowships to our school. Their uncle, the Judge, will surely advise them to go straight into chambers. So I suggest two other functions which this institution might properly recognize as its own.

It should be an institute of research. I won't go very far into that as it is obvious. When a Royal Commission of Inquiry is set up anywhere in the Empire—India, England, Canada, Australia,—as we know from what we have seen of Royal Commissions (I am thinking of the last great one on the Divorce Laws), they include a great body of investigation into the laws of foreign countries. At present such inquiries have to be organized *ad hoc*. Such a function would be a very suitable function for our proposed school. We can imagine, if in Australia it is decided to codify the taxing laws or to make far-reaching reforms in civil procedure, a very proper and desirable way to prepare for the work of such a commission would be to send the selected gentleman by whom it was intended to be summarized for the commission to London for six months or a year to work in our institution. That is an idea of one of the functions of the institute of research.

Then I put before you the idea of our school as a Staff College. I paid a visit the other day to our Military Staff College at Camberley and was immensely impressed. Here are one hundred and twenty young officers who, after about ten years' service, are sent to Camberley, knowing a good deal of their profession, and knowing what they want to learn further, and there they get admirable instruction for two years. It will not happen very often that a young barrister after eight or ten years of practice will feel he can leave his briefs and go to College, but I suggest that it will produce a very important class of persons for the Civil Service. One interesting class of civil servant is that of the diplomats. One of the things that surprised me when I first began to see Foreign Office work was what a tremendous amount of it is purely legal. Yet, when a man reaches the rank of Second Secretary, he cannot go to College and learn law. There is the Indian Civil Service and the Colonial Service too. What we want, say, in the Indian Civil Service is special groups of men to draft laws and study legislation from the lawyer's aspect, not from the point of view of the economist or the politician. The lawyer's point of view includes the whole art of draftsmanship and the framing of legislation in full knowledge of what has been done in other countries.

PROFESSOR R. W. LEE (Roman-Dutch Law, Oxford): It is a great honour to me to be invited to speak on this important subject and a great pleasure to speak on a matter which has been introduced to you in the extremely interesting paper and remarks of my old friend and former colleague in the Law Faculty of McGill, Mr Justice Greenshields. Speaking for myself, I should be inclined to say that the question of the desirability of establishing a school of advanced legal study in London is one that admits only of an affirmative answer. But, since the desirability of establishing a school is inseparable from the character of the school to be established, I propose, with your permission, to address myself to that aspect of the matter more particularly, and to ask myself and you the following questions:—

- (1) What we ought not to do?
- (2) What we need not do?
- (3) What we can and ought to do?

What we ought not to do.—I associate myself with those who say that we ought to avoid any appearance of propaganda in favour of the common law to the disadvantage of any other system of law in the Empire. Those who have the slightest acquaintance with the conditions in the Dominions, especially French Canada, can have only one opinion on that matter. The other thing which, in my judgment, we ought not to do is to attempt to establish an additional qualification for practice. In that matter I find myself in entire agreement with the remarks made by Mr Justice Greenshields. Let us therefore rule out from the start these two things: there must be no propaganda in favour of the common law, and no attempt to establish an additional professional qualification.

What we need not do.—We need not attempt to establish a School of Undergraduate Study framed upon the American model or any other model whatsoever. On that matter I join issue with the letter addressed to *The Times* by Dean Falconbridge of Toronto. As to undergraduate study, that is more or less efficiently provided for by various agencies, both in this country and in the Dominions. The circumstances and quality of undergraduate study are determined in each case by local conditions over which we can have little or no control. Let us for the present, at all events, banish from our view the idea of an undergraduate school. If such an institution were contemplated, I would ask myself, Why frame it on the American model? The American Law Schools, some of them, are justly famous. But the conditions and circumstances of the American

Law Schools are not those of a School of Law to be established in London. They have concentrated upon an intensive study of the common law. To my thinking, a School of Law to be established in London would not have any such limited concentration or object. A larger view would be imposed on us by the position of London as the centre of an Empire in which several different systems of law are in force, and also by the geographical situation of London on the edge of the legal systems of Continental Europe. So any Law School established in London should have a wider outlook than that of the common Law Schools in the United States of America.

What we can and ought to do.—We can and should establish a centre of legal study and a bureau of legal information which will contain within its scope:

- (a) The common law.
- (b) Other systems which exist within the limits of the British Empire.
- (c) The laws of the other countries of Europe and of their Colonies, whether dissociated now from the mother country, like the States of South America, or still attached to her.
- (d) The native laws and customs of the East and of Africa.
(This I mention with a query.)

That, I think, should be the scope of such a Law School as we contemplate.

Now, I ask myself, who will resort to such a school and make use of it?

- (1) Students from any part of the British Empire who want to study the common law, or its history, or any department of it.
- (2) Foreigners who wish to acquaint themselves with the common law or any part of it.

Here I may mention that indications have come from foreign countries so distant from one another as France and Japan, pointing to a great interest at the present moment in our common law system. That is a movement which, I am convinced, ought to be encouraged and stimulated.

- (3) British subjects who wish to study the civil law systems of any part of the British Empire.

I have in view the French law in the Province of Quebec and the Roman-Dutch law of South Africa. Students of these

systems cannot with equal advantage go to France or Holland because these laws are obsolete in these two countries, and their advanced legal studies ought to be pursued in the capital of the Empire.

- (4) All persons who are interested in problems of Colonial law and its administration.
- (5) Men of affairs and of business.

Reliable sources of information should be available to all persons who are concerned to know the law of any country on any particular subject.

- (6) Government departments—civil servants—Members of Parliament—all persons concerned with problems of legislation and administration.

I listened with great interest to the valuable remarks made by Sir Maurice Sheldon Amos on this point.

- (7) All persons called upon to represent the interests of this country in any conferences of an international nature.

We cannot insist too much on the vast importance to those who represent us abroad of having some knowledge of what I will call the juristic mentality of foreign nations. The projected Law School might hold that up as an object to be pursued.

I might touch on the study of native law and custom, but I must not take up too much time. I will merely ask, How can these needs be satisfied?

We want a site and a library, the best law library that the world has seen, and that will cost money. Any good law library in the United States spends at least £2000 a year on books. Our library ought to command at least £5000 a year to spend on books.

Then we want a director and a librarian and administrative staff. I do not think, to start with, you want much else. You do not want a complete apparatus of professors and teachers. The projected Law School should be a place, not of teaching, but of learning, and, as you know, teaching is the enemy of learning. That is, I venture to think, a grand idea, and I hope we may get it.

Where is the money to come from? Goodness knows. Where are the books to come from? Would it be rash to make the suggestion that it might be a possible thing for some of the existing law libraries in London to deposit with such an institution some part of their libraries which is not in constant and

everyday demand? Such a policy of decentralization of library resources has been adopted by the Bodleian at Oxford, which sees no objection to depositing some parts of its books in special libraries devoted to special subjects. One wonders whether it would be possible for some of the existing libraries in London to pool their resources in such departments as American, French, German, or Roman-Dutch law. I throw that out as a suggestion.

I am much obliged to you for listening to me with patience. One feels this is a great project and a beginning must be made. You cannot go to work altogether in the spirit which induces people to apply for shares in Morris cars. You will not get a 7½ per cent. return immediately. But if once you get a bureau of legal information and an advanced school of legal study going upon proper and promising lines, you may safely predict for it a great future.

P.S.—May I add a point which I omitted to mention, viz. group feeling, a common purpose, pride in the institution. This means some kind of common life. A mere distributing agency would not meet this need.

As to the library, a good working library with access to larger libraries would be quite enough to begin with.

PANDIT SHEO NARAIN (Panjab): I am very glad that the time limit is fixed at ten minutes, because, while trying to escape from the heat of India, I do not feel I am in another land, but am as much at home here as I was in my own country. I am expected to tell you something about our advanced course of studies. I would first explain that I shall not say anything either in favour of or against the establishment of a Law School in London as is suggested, and I believe that, at the stage where we are at present, we should merely discuss and present the idea to people who can then think about it.

So far as my Province is concerned, it will be news to many that the first rule of decision in the Panjab is that of custom. Custom is agricultural, custom is urban; therefore, if we can discover any custom, the rule of law is to decide cases according to that custom. If we cannot discover any, then, to avoid a deadlock, we have to follow Mahomedan law in the case of Mahomedans, and Hindu law in the case of Hindus. That is the state of affairs in my Province.

In the Law School in my Province, international law, both private and public, is taught. Private international law is of some use because it gives us some principles, but public inter-

national law is merely studied for academic knowledge of that subject. Further, Roman law is also taught because we cannot understand English law until we know Roman law thoroughly. English law is studied because it forms the basis of the Indian law. Law examinations are held in various acts of substantive law, contracts, finance, etc., which is a goodly number.

We have in addition Hindu law and Mahomedan law, and these are again divided into certain schools. The students are in addition taught jurisprudence, and very good textbooks are selected. I was not quite clear—What are we to understand are “advanced studies of law”? If the meaning is to trace the evolution of any particular law and how it came into existence, what stages it passed through, and how it came to its present stage, we have not much material on that point, except the philosophical and learned work, like Mayne on *Hindu Law*, or Maine’s *Ancient Law*. I think, perhaps, “advanced study” means not knowledge of the law as administered, or knowledge of the law for lawyers who do the legal work. I would elaborate the idea that it is something higher than what the Inns of Court in England or the Law Schools of India teach—that is to say, it means something more or less akin to scholarship and research. If that is the case, I extend my support to the proposal because then we have a distinct line to pursue. We undertake scientific research in all subjects, and law should not be an exception. We have to see how human law advances in certain matters, and trace the basis of customs that at present exist. So far as investigation and research in law are concerned, I uphold the proposal.

To start with, a Research Chair might be established for the study of comparative laws, etc., and until qualified professors come into existence no pupils can be taken into such a school merely to be put on a track for the advancement of learning and scholarship. But I feel that it would be useless to establish a school which would teach the same thing as the Inns of Court and other Law Schools. My opinion is that “advanced studies,” without defining what they connote, will not elicit any definite answer.

THE RIGHT HON. H. P. MACMILLAN, K.C.: As an imperfectly educated lawyer from North of the Tweed, I should like to join the speakers who have preceded me in commending this inspiring project. When I say that I am an imperfectly educated lawyer, I cast no disparagement on the excellent Law School in Glasgow University which I attended; but it is perfectly

impossible for a law student in Scotland to derive from the curriculum through which he passes in preparation for his professional life anything more than the elements of the legal subjects he has to study. No doubt the method of remedying such deficiencies which we adopt in this country is eminently British. We do it at the expense of the public. And that process is one which, I am glad to say, I am still continuing. But the remarkable fact cannot fail to strike anyone who is interested in the science of law that there is at the moment, so far as I am aware, no adequate provision at all (I speak subject to correction) for the further pursuit of academic legal studies by the young lawyer who has taken the ordinary classes which are assumed to equip him for the practice of his art. The moment he begins to practise professionally he realizes the enormous gaps in his knowledge, and I, for one, should welcome the provision of some means whereby legal education could be carried a stage further for those who are fitted to benefit thereby.

We heard this morning some comments, adverse comments, on the undue tendency to specialization in modern education, but in law you cannot escape specialization, and it seems to me that one of the main purposes which such a school of advanced studies would serve would be to enable those who desire to take up any particular branch of study upon which they could not acquire sufficient learning at their own University to resort to a central school where they could work in an atmosphere which would foster research and encourage scholarship.

I think I may say, speaking as a Scotsman, that all educational projects commend themselves to my nation, and I am happy to be able to provide—perhaps a little prematurely—for the proposed school of advanced legal study a motto which will appeal to you all: “No man can be a knowing lawyer in any nation who hath not well pondered and digested in his mind the common law of the world.” These words were written by Lord Stair, the greatest of all Scots lawyers. In contemplating the present project one naturally thinks of the contribution which each of the branches of our Empire will be able to bring to the new school. The British nation is peculiarly fitted to promote such a school, for it has been ever our policy not to impose one system of law upon all parts of the Empire, but to allow the native or imported systems which existed in its various territories to continue. In Scotland, of course, you have an example of the persistence down to the present day of a system of law which, so far from being absorbed by the law of England, maintains a vigorous independence of its own. That body of

Scots law ought to be put into the common stock, and I say that for this reason. In Scotland, whatever be the cause, we have a native genius for the principles of law. We have developed there a legal system pre-eminently on philosophical lines. For two hundred years we had a succession of great legal writers who recorded in a systematic form the whole body of our law, so that with us, when we desire to establish a proposition in law, we refer to these masters whose authority is as great with our Courts as a decision of the House of Lords.

I have already mentioned Lord Stair, who lived from 1619 to 1695, the author of the great *Institutions of the Law of Scotland*, of which it was said that he built on the solid foundation of the Roman Civil Law, as modified by the equity of the canon, and adapted to modern circumstances by the civilians of France and Holland in the sixteenth and seventeenth centuries. He was followed by John Erskine of Carnock, who was born in 1695 and died in 1768, the author of the *Institutes of the Law of Scotland*. Then came George Joseph Bell, 1770 to 1843, who wrote not only the famous *Principles of the Law of Scotland* but also the *Commentaries*, in which he dealt with the whole range of mercantile jurisprudence.

In Scotland we are supposed to have a canty conceit o' ourselves, and perhaps the tribe from which I derive is more prone to get than to give; but in approaching the project which is the subject of our consideration to-day I feel that we can all give as well as get, and the aim of a central School of Law should be to form a focus for all the different systems of law throughout the Empire where we may share each other's difficulties and each other's successes, so that we may be in a position to produce an even more perfect system of law for imperial administration.

I was much interested in one aspect of the scheme alluded to by a previous speaker—the material of study. It would be eminently desirable that a great law library should be associated with such a school. You want a library in which it would be possible to refer to the textbooks and reports of all the countries now comprised in the British Empire. At the present moment it is often exceedingly difficult to get guidance and access to those sources. When one thinks of all the lawyers of the Empire who resort to London, many of them concerned in important legal matters of business, how desirable it would be to have such a library provided in association with a legal school.

That aspect should not be left out of sight, but the chief concern is that there should be a place where the means of carrying on specialized studies in every branch of law should be

provided such as cannot be afforded at the home University of the student. It should be possible to study intensively every system of our imperial jurisprudence in the great capital of the Empire.

It has been well said to-day that we are merely on the threshold and are still at the stage of discussing the pros and cons. There is the mind that is *always pro negante* and thinks it undesirable to establish anything new, and there is the mind that is enthusiastic and ready for any new venture. Between these two is the moderate person who likes to see where he is going, and for him such a discussion as we are having should be eminently productive of ideas which I hope will mature into something complete and satisfactory. For, after all, while justice is one and indivisible, the applications of justice are manifold, and it is of inestimable importance that in endeavouring to attain to the common end of the achievement of justice, we should have opportunities of studying all the various methods adopted throughout the Empire, and so each obtain the best guidance for our individual requirements.

DR BAGCHI (Calcutta): First of all I must thank the authorities of the Universities Bureau for the opportunity they have given me of being present here in my old surroundings and talking before an assembly of experts on a subject with which I am connected in India. When the Secretary of the Universities Bureau first addressed a letter to the Vice-Chancellor of the Calcutta University, the letter was forwarded to me and, at his request, I sent him suggestions in a memorandum. Some of the points have already come before you, but I want to put forward two reasons which led me to adopt the views I hold on this question:

- (1) In matters academic we, in Calcutta, like to cite the University of London, and generally the judgment goes in our favour whenever there is a decision of the London University on a similar point.
- (2) The broader aspect of advanced law teaching.

It has been said by previous speakers that one of the fundamental objects of the proposed School should be the teaching of universal law, in the sense that it will deal with the peculiarities of the different systems of the various countries and combine them into one. But I look at the question from another standpoint, though ultimately it coincides with that of previous speakers.

In Calcutta, in my College, we managed to establish a School of Law, one of the aims of which was to provide for research work in advanced law. Of course elementary law teaching, as done in most of the Universities here, and the professional law teaching, as taught at the Inns of Court, do not form the special matter of our discussion. But I would like to see law teaching taken up in that broader spirit which we find now on the Continent or in America, where more and more the feeling is growing that jurisprudence is a subject which is connected with other branches of learning and forms the philosophical background for the study of law, and that, if we are to make the teaching of law living, we cannot ignore the other sides of intellectual activity which are so closely linked with it. In the higher teaching of law the basis should be as broad as possible, and its connexion with sociology, with ethics, and with economics should be shown. In France Professor Salcilles does not content himself with citing a string of cases—*Walsh v. Lonsdale*, or *Cave v. Cave*—but goes on to point out what bearing the law has on the broader problems of life, and its contacts with other branches of learning.

Professor Vinogradoff also set down, in one of his reports on law teaching, certain points which occur to me now. He tells us to remember that it is realized more and more by students that jurisprudence affords to philosophy a background for the study of law, and goes with the cognate subjects of geography and history. Law has been said to be neither a science nor an art, but a dodge; but it is this shallow generalization which is responsible for the present state of law teaching. I cannot say that the scientific teaching of law does not prevail in England, but in the sense in which Paul Vinogradoff was writing it does not do so. If law is to be a living subject, you must bear in mind that it is the most splendid manifestation of the eternal spirit of life.

There are other sides of the question too, even when we are taking up law in its true spirit. We should not look to the details so much as to fundamental principles which are common to all the legal systems of the world. It is not necessary to take up one individual branch of law, whether of Canada, India, England, or the whole of Common Law, but what should be done is to study law comparatively, so as to apprehend the aim of all its systems. Perhaps we shall be told that this is a Quixotic theory, but I want to lay stress, not on the details of law teaching, but on the basis on which the higher teaching should stand.

In Calcutta we have made an attempt in this direction, and

I should like to see the same thing adopted in London. I should like to see a school of higher teaching of law which does not limit itself to the details, but goes to fundamental principles and combines the study of Comparative Law and Comparative Jurisprudence. A Sociological School of Jurisprudence has been started already in America, and on the Continent there is a system very like the one that I have sketched. We might establish three branches:

- (1) A Chair of Legal History;
- (2) A Chair of General Jurisprudence;
- (3) A Chair of Comparative Law.

The study of Comparative Law should include especially Mahomedan and Hindu law. I repeat that law is something which embraces within itself the whole province of life, and the jurist must look at it from many standpoints. I should like to suggest as a motto the words of Professor Salcilles: "*La loi n'est pas une musée de l'art. C'est une représentation de la vie.*"

PROFESSOR GUTTERIDGE (London): I propose to confine myself to one subject—the need for immediate action in this matter. It is now wellnigh a hundred years since this question first came before the public in England. It was before Parliament in 1854 and nothing was done. It has come up for discussion on innumerable occasions and has frequently been debated amongst lawyers, and yet we stand now where we did a hundred years ago. I am one of those who hope that something more will result from this discussion to-day than we have ever had before.

May I point out one thing? I feel convinced myself that, if we only take the requisite steps, it will be possible to do something practical at once. I am quite aware of the difficulty of finance, but I venture to think that without spending a very great deal of money we might be able to make a start. It is true that we want premises; we must have something which incarnates the ideal, something to which people can point and say, that is the headquarters of the Imperial School of Law. As regards a library, we must get the great library referred to as quickly as possible; but we are not without books in the meantime. There are the libraries of the Inns of Court, and I should very much like to take this opportunity of thanking the benchers of the Inns of Court for all they have done in the last few years to assist foreign and Dominion students who have

come to London. They have done much more than the public are aware. The resources of the Inns have been placed with great generosity at the disposal of these students, but the inconvenience which results is this. Most of the books, though not all, which a student may require, will be found either in the British Museum or in the libraries of the Inns, or the Law Society, or in those of University College or King's College, or at the London School of Economics. In the last named place we have certain books dealing with Comparative Law which are rarely to be found anywhere else except America. But the student does not know where to look, and his adviser himself is often at a loss. The Benchers might do something to help. If we could obtain the consent of the Masters of the Bench of the various Inns to the institution of a central catalogue, a great many difficulties would be removed.

With regard to the matter as a whole, what we really want is a legal laboratory—a headquarters for advanced legal studies. The students are here already and are coming in increasing numbers from the Dominions and abroad. This last year I have had through my hands students from eight different European countries and from several of the Dominions. In most cases their reason for coming to London is that they want to make a study of some branch of their own law in comparison with the corresponding branch of English law; in the majority of cases it is maritime law, but not increasingly so. There are also English students who do not wish to take the higher degree courses of the University of London, but to make a particular study of some branch of law, and if we should only make a start with the modest resources now available we could convince the public of the value of our work, and it would only be a short time before we got our buildings, our library, and our advanced courses.

I hope something will be done to-day which will put this question on the move, and will not leave it where it has been all these years.

LORD JUSTICE ATKIN: I have been extraordinarily interested in this discussion because it is a matter which has been before us for a number of years. Perhaps I may say for myself, in particular, who have been for the last few years Chairman of the Council for Legal Education, that it has been a matter which has always been before me and has also come into view in respect of the work I have to do on the Senate of London University and as a Benefactor of my own Inn.

I have listened to the actual proposals made, and it would appear that one thing certainly emerges—that we are unanimous in desiring to have some form of central teaching or research in London beyond that which we have at present. But when we come to discuss in concrete form what are the proposals made and what should be done if we had a million pounds handed to us to-morrow, it does not appear that all of us can agree.

Professor Lee made a suggestion that we should have a Director of further advanced legal studies for the Empire; that we should have an Institute, a place where he resided, and a big Library where these students of the Empire should study, no doubt under the direction of the Director. But he was content with that and, apparently, his system did not contemplate any organized teaching. That is a school without teachers, but a school under a Director.

On the other hand, from what was said by other speakers, it seemed that they contemplated a school in which the students of the Empire who came to this country could get further teaching than they received at their own school. I think it was Mr Macmillan who suggested it should be such a place that any student of law who desired to specialize in any subject could pursue his special studies, I understood, under a teacher. It was one of the difficulties of the case that some of the other speakers suggested that this was a school where civil servants, diplomats, and even young barristers of ten or twelve years' standing or so, being seized with a desire to refresh their legal knowledge, might come and be taught. There is nothing to prevent them from pursuing studies at the present moment unless it is that they must be taught under special teachers.

We have not quite made up our minds, therefore, whether it is to be a laboratory under a Director, a big library, or whether it is to be an organized institution with specialists in every subject, in which the student from abroad could study. The Pandit from the Panjab suggested it meant higher learning and study of the laws of the British Empire. If there is to be a school where everybody can study a particular branch of the British Dominions, you would have to have a staff of skilled teachers, which would require a very large endowment, and it appears to me that you would have to set up an elaborate organization which, to begin with, would make use of these teachers who, we are told, are at present only giving undergraduate education.

The matter, I think, ought to be faced as a practical subject.

I can conceive of the great ideals of a great University and School of Law teaching all subjects for everybody. But I believe that will remain an ideal for the reason that the bulk of the students in this country will always come to acquire their necessary professional qualifications, and it is out of the realm of probability that those who control the professional qualifications either for the Bar or for solicitors will surrender their control of the necessary standard to any particular School or College.

To my mind the great value of studying law in London is that you get to know the spirit of the law and the spirit of the administration of the law. That is the great advantage which a man gets by coming to London. But, on the other hand, there is no doubt that many topics of common interest could be studied in this country which are common to the law of all the Dominions. There are great questions of jurisprudence, but there are questions of commercial law which are pretty nearly the same, and the differences would be the most interesting subject of study. There are questions connected with the whole of the law of torts and the comparative law in relation to the law of torts. To my mind one of the most important subjects is constitutional law, which could be taught with great advantage.

Then there are questions of how legislation is proceeding in respect of such topics as industrial law, compulsory insurance and international law. But, if you are going to have the advantage of advanced studies, I, for my part, am not prepared to consider a scheme practicable which does not involve invoking the assistance of teachers. I do not believe that the student is coming here to study by himself because, if all he wants is a library, he can get for practical purposes the equivalent of a good library without coming to London. He wants direction. So one thing that is essential is, if you are to have some institute for further teaching of law for the Dominions, you must have a Director, and the Director should be a person who is capable of directing aright the student who is desirous of pursuing these studies—and especially where to find the books and the teacher. To my mind there is no real difficulty in so co-ordinating the teaching at present available as to get teachers to allow themselves to give their services, so that if a student wanted to be taught in commercial law he could be directed to a teacher now teaching commercial law, and the same with international law.

That would be a great advance. You would have the whole teaching strength of London available for this Institute by the proper co-ordination of the teaching authorities, and, though I

have no authority to pledge the Inns of Court, I see no difficulty about it. Our lectures are available to all who come—four guineas for all lectures for a year; six guineas for two years; which is cheap in view of the fact that at the present moment we have as distinguished a teaching staff as the Inns ever had, and a staff which would compare with any available in any faculty of law.

That seems to me to be a practical proposal, and the way to carry it out, I suggest, is for the Universities Bureau to form some small committee at once, consisting of representatives of the different Dominions, who would try and put forward some concrete scheme. I am sure you must begin slowly. You are not going to have a great School of Law created in a night, it must rise slowly, like some tall palm.

That brings me now to the question of the library. It is a great scheme to have a great library of Dominion law. Professor Lee says that the books alone ought to cost £5000 a year. You have to find a central site in London: and sites are expensive. Then you must put up an adequate building. My experience of building in educational matters has not been encouraging. You may be able to raise money in the Dominions and London, but people have a great distrust when lawyers ask for money, and I see great difficulty in starting on a large scheme.

You must remember that in London we have four or five excellent law libraries. I dare say that no one of them is equal to one or two of the libraries in the great American schools, but put them all together and they are unsurpassable. In addition to that there are the records and the means of research in London alone. And all the library authorities, it appears to me, either give or would have no difficulty in giving facilities to graduate students. Most of us have a collection of Dominion statutes, Dominion law reports, and some Dominion textbooks; but I do suggest that the representatives of the Dominions might easily get their Governments to make some contribution to the different libraries for statutes and law reports and textbooks. If the study of comparative Dominion law is to be maintained, that must be done.

I desire to make some sort of contribution to the discussion which would be practical. I am quite prepared to support the ideal of the great University, but I do wish to get on towards something which would carry out the obvious desire of those representatives of my own profession whom I am delighted to see before me, who have come to this country, some for the express purpose of advocating this project. I believe we can

do something to form an Institute, start with a Director and get some small local habitation; if it be only two rooms it would be a place to which students could go and be directed where to go, what to learn and be introduced to the necessary teacher who could give them guidance. That would go a long way—not all the way, but we could develop from it and in time might meet the millionaire or a Government who would give us the necessary money or site. If those who are interested in the project were to come together with a view to forming a committee, I think we should have gone a long way on the road we desire to travel.

MR. W. J. ISBISTER, K.C. (Adelaide): Lord Justice Atkin has made some very practical suggestions. The small contribution which I wish to make to this discussion is to present in as short a compass as possible the way in which I think this project would appeal to an Australian law student coming to this country and not intending to settle here but to return to his own country at the conclusion of his term of study.

I think I share with Lord Justice Atkin the embarrassment of not knowing beforehand exactly what was proposed. I had not heard this project mooted before, and I must confess that the title, as it stands, left me in doubt, and still does so, because the propositions put forward this afternoon are very divergent. If, however, nothing definite results from this discussion, we shall be, if not wiser, at least better informed.

The embarrassment that I felt was this. Was it proposed to have a school or a library with the necessary attendants, or merely some kind of office or bureau which could direct students in their researches.

Then I am met by this further difficulty, that I do not know whether what would be aimed at by the majority of the speakers this afternoon is the teaching of all the different systems of law prevalent in the British Empire, or merely that English law should be taught more comprehensively than it is at present. Assuming, however, that all that is to be attempted is the better study of the English system of law, which is the only system that we have in Australia and New Zealand, for these two Dominions differ from India, Canada, and South Africa in that they are essentially British communities as regards their law; is it to be a more intensive study of those subjects which are essential to the ordinary practising English lawyer; or is it to be the study of those so-called academical subjects which are not essential for the ordinary practice of English law, and

are not studied by the man who intends only to make a living out of the law? The phrase "advanced legal studies" seems to me to be a little ambiguous.

The so-called practical subjects are sometimes referred to in a somewhat uncomplimentary way as merely bread-and-butter subjects. With equal disparagement the less practically useful subjects are sometimes referred to as merely academic subjects. I do not agree with either of these views.

—I think that whilst the more practically useful subjects, the bread-and-butter subjects if you like, may be, and I am sorry to say often are, taught and learnt in a more or less bread-and-butter or rule-of-thumb fashion, nevertheless they are probably (procedure possibly to a large extent excepted) capable of being studied and taught as branches of science and in a scientific method.

The principles of the English system of law are, I should imagine, as much capable of scientific exposition and application as the principles of other systems of law. I think that anyone reading the late Mr F. W. Maitland's works will feel this, though I am not forgetting an article which he wrote early in his career, and which was published in the *Quarterly Review*, on the English Law of Real Property.

I assume, then, that what is proposed covers the advanced study of those subjects which are more practically useful to the student of English law, as well as those others which I have indicated.

On this assumption how would such a school as is proposed appeal to an Australian post-graduate student. Now, I think we in Australia recognize that in Great Britain, and especially in London, there exist facilities for legal study and research such as exist nowhere else. Apart from the University there are in London the libraries of the Inns of Court and of the Law Society and the Record Office, and there must be other mines of information in the British Museum, and probably in the offices of the Dominions Department, and also perhaps in the offices of other departments of Government.

The men coming from Australia will, I think, mostly be men who have already taken a law course in an Australian University, and who are desirous of widening their outlook and improving their knowledge of law.

A large proportion of them will, I think, also be men whose aim is to become better equipped as lawyers practising English law. Comparatively few will, I think, be men desirous of studying the less practically useful subjects. There will, I hope, be a

few men of this latter class, but I think it will be only a stray student now and again, and very probably a man capable of pursuing his researches apart altogether from the formal teaching of a school.

As for the more numerous body of probable students, those seeking to perfect themselves for the practice of their profession, it seems to me that such a school as is proposed is scarcely necessary.

I think such a student could not do better than read in the chambers of some good practising barrister. It is the opportunity that the research or advanced student wants, and in the atmosphere of the best type of a practising barrister's chambers; he should have sufficient previous training to enable him not only to improve himself as a mere practitioner, but, if his tastes lie that way (and in such work nearly everything depends on the man himself), to acquire an interest in law as a science, which, rightly understood, is probably the most perfect mirror of the life of the country.

It seems to me to follow from what I have said that if the proposed school should attempt the teaching of all the legal systems in force within the Empire, its possible attraction for an Australian student would not be increased, the case of the exceptional student, always, of course, apart.

A student of Comparative Law would probably be attracted, but such students, wherever they come from, must, I think, be a limited class, not numerous enough to justify a large expenditure on a teaching staff, and the very large expenditure which would be involved in collecting a library illustrative of all the systems of law within the Empire.

I take it that we are assembled to try and draw up a practically useful programme, and, if so, its usefulness will probably be measured rather by the number of students it will attract than by the eminence of its teachers or the magnificence of its library.

I would like to add that I agree with the suggestion made by Lord Justice Atkin that properly qualified students coming from the Dominions should be encouraged by being given facilities to tap the mines of information which exist in this country and exist nowhere else. Speaking from my own experience of over thirty years ago, as a student of English law I found that every reasonable facility was given for pursuing one's studies.

I hope I have not sounded too discordant a note in this discussion, but I only wish you to understand how this proposal would probably appeal, as a practical proposition, to others, like myself, coming from Australia.

PROFESSOR DE MONTMORENCY (London): That a practical scheme should be constructed is clear from what Lord Justice Atkin has said. I had proposed to move a resolution to the effect—

That an Imperial School of Law situated in London is an imperial necessity, and that the formation of such a school should be considered by a committee appointed by the joint action of the various communities of the Empire.

I understand that resolutions are not possible here, but the committee suggested by Lord Justice Atkin would carry out the object of such a resolution.

There is one point upon which I am very urgent that has not been touched upon, except in a rather deprecating manner by Professor Lee, who said that he doubted whether customary law should be a subject of research in this proposed School of Imperial Jurisprudence. This is the point. Such a school would be, to my mind, if it comes into effect, a most desirable link of Empire. You cannot have formal inelastic constitutions of Empire; you can have spiritual links, and this school, in my judgment, would be of that character. But it would only be of that character if it brought into the field of discussion not only the various systems of modern jurisprudence operating in various parts of the Empire, but also those systems of law under which, beneath the most various skies, the non-European races live, sometimes in a high state of civilization.

We want the study of customary law for two reasons. First, because it would permit us to enable the various parts of the Empire to understand one another; and without self-knowledge the Empire will not grow in strength; and, secondly, because I see in that material of customary law within the Empire (at which I have worked for the last six years) the means for founding a jurisprudence which is not merely an *a priori* jurisprudence, but one which is based on a scientific statement of living facts. If there is to be research and the advanced study of law, to shut out the customary systems of law in the Empire would be, if I may be allowed to say so, absurd.

This is the note I wish to adopt—that this proposed School of Law will prove a great source of imperial strength, and, not least, by the knowledge of one another which such a school would inevitably imply.

IS IT DESIRABLE TO ESTABLISH IN LONDON A SCHOOL OF ADVANCED LEGAL STUDIES?

IN full measure I express my grateful acknowledgment of the honour done me, and the University from which I come, in asking that I put in writing, for publication and circulation, my views as to whether the question above stated should be answered in the affirmative or a negative answer be placed on record.

I accepted the task with hesitation and misgivings. The hesitation did not arise from lack of interest, but rather from a consciousness of my own limitations; the misgivings were inspired by the fear lest what I write would be so greatly coloured by local conditions and, possibly, provincial considerations, that the result might be to hinder rather than to help the furtherance of the object which I so greatly desire.

Here, and at the outset, with the reservation of a possible modification after full discussion of the question, I state my answer to be in the affirmative. I am aware that what I write will not possess the merit of originality. The question is not new; it has been considered and discussed by others of greater experience, greater knowledge, and greater ability than the writer possesses.

I disclaim any intention of suggesting in detail the manner in which the school should be organized or established; in like manner, I shall refrain from other than a mere suggestion, if and when established, along what lines it should be conducted. To attempt anything further would approach presumption on my part. It is my desire to confine myself wholly to the question of the desirability of establishing such a school, leaving to others the determination of the manner of its formation and the details of its operation. Of necessity, what I say will be in great part suggested, and to some extent influenced, by conditions and considerations of the Province in which the University, of which I am a delegate, has carried on its educational activities.

It would seem beyond doubt that if the principle is adopted, or, in other words, the "preamble of the Bill" be accepted, London is the place where the school should be established and

carried on. To me, the reasons are apparent and convincing. A School of Advanced Legal Studies—Empire-embracing and Empire-wide in its aims and purposes—should have its home in the very heart of the Empire. Other considerations and reasons more cogent will readily suggest themselves to others to whom the reasons are more familiar.

II

For a short period of time (1763–1774) the English law was, by Proclamation, declared to be the law governing the subdued people and the ceded territory, viz. that part of the now Dominion of Canada known as the Province of Quebec.

In 1774, with the magnificent generosity that has ever characterised the English nation, it was enacted that in perpetuity, in the matter of property and civil rights, the old law of France should prevail. The criminal law of England remained the law of the new possession.

In 1866 a Provincial Statute was passed, which is known as the “Civil Code of the Province of Quebec.” That code purports to embody the entire civil law of the Province, that is, the law governing property and civil rights.

Apart from this, we have borrowed largely from the Mother Country. Our criminal code has for its foundation the common law of England. Where our code is silent, the common law of England prevails. Much of what I might call our “commercial law,” the “law merchant,” has its source and foundation in the English law. Our dominion-wide Bankruptcy Act is copied almost word for word, *mutatis mutandis*, from the English statute. Our law governing negotiable instruments—bills, notes, etc.—is admittedly of English origin. The law of evidence in commercial matters is taken from the English rules.

It is true that the chief aim of every Law School in the Province of Quebec (there are three) is, and ever must be, a thorough teaching of the civil law as contained in the Civil Code; but even a knowledge, however thorough, leaves the student much to learn of the law of his own Province, to say nothing of wider fields.

If a young graduate of McGill University could avail himself of a period of study (to be determined upon) at a School of Advanced Legal Studies in London, I have no doubt whatever the result would be of immense benefit to the individual, and would ultimately reflect most beneficially upon the profession in his own country.

Possessing as he would, to a greater or less degree, a knowledge of the great fundamental principles that underlie all systems, a course of teaching in comparative law would necessarily confirm and strengthen his knowledge of his own law, and it would, most assuredly, tend to round out his legal education.

In Canada we have no School for Advanced Legal Studies; we have no Postgraduate Course. In the Republic to the south more than one exists. Harvard, with its vast, almost unlimited financial resources, has for some years maintained such a school. It is equipped in the way of teaching staff, library facilities, etc., as perfectly as money and careful management can make it. Some of our Canadian graduates seek its advantages. I endeavoured to obtain exact figures as to the number, but, unfortunately, the figures have not yet reached me. It is regrettable that such of our law graduates as go to Harvard (few though they may be) have no such school available within the Empire.

As I write, I have not in view the result so far as the future active practitioner is concerned. I have rather in view the making of a highly educated, learned jurist. I am not greatly exercised with the commercial or money-making side of the question.

In course of time, as the years went by, I have no doubt that we would have in Canada graduates of our Law School, highly educated men, qualified to fill the chairs of our Law Schools, all of which would ultimately reflect to the great advantage of the profession generally.

A considerable percentage of the legislators of the Dominion come from the legal profession. Naturally, and properly, they exercise a very considerable, if not a controlling direction of legislation. The advantage of a preparatory course at a school such as I hope to see established in London on Comparative Legislation is perfectly apparent, and must be conceded. In my mind, there is no room for doubt. What I now say with respect to the Province of Quebec is equally true, I am satisfied, of the other Provinces of the Dominion.

I have no doubt that if the time does come to establish a school of advanced legal studies in London, a far more comprehensive curriculum would be arranged than I at the moment care to suggest.

III

In discussing the desirability of establishing a School in London for Advanced Legal Studies with the members of the Law Faculty

of McGill, objections have been suggested ; fears were expressed lest perchance that school, when established, would proceed in its activities to entrench upon, or conflict with, present existing systems in the Dominion—would, as it were, enter into competition with the institutions already established in the Dominion for the purpose of elementary legal education.

Each of the Provinces of the Dominion has, at least, one Law School. If the idea prevailed that the School of Advanced Legal Studies would replace any of these in fitting the young men of this country for membership in the local Bar, I am satisfied that it would be strenuously resented. So far as the Province of Quebec is concerned, I can speak with assurance, no certificate from a School of Advanced Legal Studies would ever be accepted, admitting the bearer to membership in the Bar of the Province. I repeat what I once said on this subject : " I am convinced that a course, however extended as to time and thorough as to teaching, would not be accepted in replacement of the requirements in force for admission to the profession in the Province of Quebec." I believe, with equal certainty, I may make the same statement concerning the other Provinces of the Dominion.

If the School for Advanced Legal Studies comes into existence, I will miss no opportunity to impress upon the students, prepared as they have been by a course in our Faculty, and upon receiving our Faculty degree, to take advantage of the privileges and opportunities offered by the London School, and follow its teachings for such reasonable length of time as the individual circumstances of the particular student would permit.

Apart entirely from the advantages of study and teaching, the contact of the student from the Dominion with others from within and without the Empire cannot fail in its broadening effect. Our men would come back better and bigger men in every sense of the word ; they would come back with deeper affection and admiration for the Empire.

I have had the opportunity of reading a most interesting letter of Professor Guttridge, appearing in *The Times*, and I only add a statement of my complete agreement where he says : " All that is necessary can be achieved by a carefully planned and well-organised system of collaboration between the professional bodies and the Universities, which would further have the great merit of avoiding any possible isolation of the Dominion student owing to his segregation in a separate school of law where he would have no opportunity of coming into direct contact with English students."

Might I add in conclusion. So exalted is my opinion of professional standards and ideals in England that I am convinced, if the Dominion student could be given an opportunity to come in contact with members of the English Bar in their everyday work—be given an opportunity, to some extent at least, of learning their methods—the result would be of untold advantage.

R. A. E. GREENSHIELDS.

THE DESIRABILITY OF ESTABLISHING IN LONDON A SCHOOL OF ADVANCED LEGAL STUDIES.

LETTER FROM PROFESSOR SIR W. HARRISON MOORE, DEAN OF
THE FACULTY OF LAW IN THE UNIVERSITY OF MELBOURNE,
TO DR ALEX HILL.

The delay in answering your letter of January 21st is due, partly at least, to inquiries I have been making as to the views of my colleagues in the Law Schools of Australian Universities on the proposal to establish in London a School for Advanced Legal Studies. What I am saying now contains my own views and those which I have been able to collect.

By "Advanced Legal Studies" I understand something beyond the qualifications ordinarily required for admission to the legal profession, or for a first Degree in the Universities, even in Honours: postgraduate, and not undergraduate work. It is of course quite possible that it may be associated with a more exacting standard for admission to the profession; but that is not a matter on which any opinion from Australia would be of value.

Australian interest in the subject lies in the opportunities and inducements for advanced studies that such a School would open up for such of our graduates as are able to go to England for a year or two, in the value of a centre of legal study to professors and lecturers in law schools visiting England, in the provision that would be made for the training of men for academic work in law, in the improvement in the character of legal literature to be expected, and in the cultivation of a deep and broad study of the law in all its aspects.

Taking this last consideration, we believe that there is a vast amount of work to be done in Jurisprudence and in Public Law. Both of these have suffered from being treated as elementary subjects in courses of study which even in their later years were not very advanced. "Jurisprudence" has been regarded as a specific subject, with fairly defined limits, and with no very close relation to or significance for our own law. The wide range of studies—all of them of importance both in the administration of justice and in the development of law—which fall within the notion of a science of law has hardly been appreciated and

has certainly been neglected. "Historical Jurisprudence" is too much limited to "Ancient Law" and regards too little the characteristics, developments, and tendencies of our own time, *e.g.* the significance of the corporation in modern life. The "Science of Legal Method," which has recently produced so extensive a literature in Continental Europe, is so far as English Law is concerned left to American scholars.

Constitutional Law is of peculiar interest to those who live in a Dominion, and is constantly presenting problems of a fundamental kind. The relation of a statutory constitution to the principles of our constitutional development, the nature of the several branches of government—executive, judicial, and legislative—and their relation, the problem of juristic personality and unity of "the Crown," the source and authority of "responsible government," the extent of the devolution of the powers of the Crown, the position of colonies and dominions in international relations, and the whole multitude of questions belonging to the "new status of the Dominions"—these are illustrations of the questions that require investigation and discussion before any authoritative determination can be satisfactory.

To keep alive and stimulate an interest in law as a science amongst busy professional men is not in any circumstances an easy matter. But with the best will in the world, it is impossible for such men to avoid a narrowing of interest if the law can offer them nothing but statutes, reports, and books of reference. Probably we feel this more in the outlying parts of the Empire than you do in England; perhaps because the study and the practice of the law are less generally founded on a broad and liberal education. Where the general education has not been of a kind to protect the mind against the narrowing tendencies of a busy profession, the need is the greater to give the professional studies themselves the utmost liberality of which they are capable.

In conclusion I might say this. It is, I think, inevitable that Dominion Courts should owe less to British Courts in the future than they have done in the past. The tendency is to restrict the appeal to the Privy Council, and our Courts are now accumulating a mass of case law which in time will to a great extent oust the English decisions from the place they have held in our arguments and in the judgments of our Courts. In those circumstances, we shall become more dependent on schools of law and on the literature of the law to keep the several systems in harmony and to interpret them to each other.

The achievement of the purposes of a School of Advanced Legal Studies must of course depend upon its attracting to its Chairs men of the highest intellectual and scholarly equipment and inducing them to accept the work of such a school as their career. That means that the positions must be paid well enough to enable men to accept this career, and not merely to treat them as an adjunct to other work or a stepping-off ground for practice at the Bar. Whether in London any inducements can counterbalance the attraction of a career at the Bar; whether at the very centre of the administration of justice, men who love the law as a living force will not be irresistibly drawn towards the practice of the law, I cannot say.

MEMORANDUM BY J. N. DAS GUPTA, M.A., M.L., DEAN
OF THE FACULTY OF LAW, DACCA UNIVERSITY.

One of the greatest needs of the Empire is to have an Advanced School of Legal Study in London for the following reasons:—

1. The multiplication of common platforms for intellectual activities is the best way of strengthening the solidarity of the Empire.

2. The question of maintaining supremacy in *all* spheres of intellectual activities is more important than that of maintaining supremacy in armaments, etc.; supremacy in respect of contributions to legal theory and history is being endangered by the Law Schools of the United States of America.

3. If there is scope for higher studies in Ethics, Politics, and Sociology, there is still wider scope for Law; the importance of legal theory and history is not at all lessened by handing over the application of rules of law to the judges and lawyers who find little time to devote to systematic study of theory or history of law.

4. The higher degrees in law conferred by the various universities of the Empire require to be standardised; a central school of higher studies is the best means of doing this.

5. It is very difficult for the Universities in the different parts of the Empire to arrange higher teaching in the various branches of law; London is the best place for supplementing the labours of a permanent body of law scholars by those of a renowned body of legal practitioners. London is also the most suitable place for temporary exchanges of teachers from the various parts of the Empire and of the world.

WEDNESDAY, JULY 14—Morning Session.

CHAIRMAN:

THE MOST HON. THE MARQUESS OF LONDONDEERRY, K.G., LL.D.,
P.C., CHANCELLOR OF THE QUEEN'S UNIVERSITY OF BELFAST.

“Co-operation in Research throughout the Empire.”

THIRD SESSION.

LORD LONDONDERRY: I hope I may be forgiven if I commence our proceedings this morning upon a somewhat personal note. I am occupying the Chair to-day in my capacity as Chancellor of one of the younger Universities of the Empire, the Queen's University of Belfast. That office is a distinction which I prize most highly, and, speaking as Chancellor of the Queen's University, I desire in these few words to express, on behalf of the University, her thanks for the honour which in my person you have conferred upon her, in inviting me to preside over this important Congress of the representatives of the Universities of the British Empire.

The topic for discussion this morning is: "Co-operation in Research throughout the Empire."

In Science, in Art, in every department of knowledge, man's progress is slow. "For precept must be upon precept, precept upon precept; line upon line, line upon line; here a little and there a little." Year by year, nay almost day by day, we learn that the way of co-operation is the broad high-road to progress.

The benefit of humanity without respect to nationality, colour, or creed is the object of the true discoverer, the true servant of Science. Every other seeker after knowledge is his brother; every University is his University; every effort to advance is an effort in which he shares, because it is an effort in the common cause.

The very life's breath of this Congress, of the whole organization of the Universities Bureau of the Empire, appears to me to be the spirit of co-operation, and I can imagine no audience before which the case for co-operation in research, in every field of science and knowledge, could be more suitably and sympathetically argued.

Sir Thomas Holland, who is to introduce the subject of discussion this morning, needs no word of recommendation from me. His name is familiar to us all. I will simply call upon the distinguished Rector of the Imperial College of Science and Technology to open the discussion.

Discussion.

SIR THOMAS HOLLAND (Imperial College of Science): In an interesting article which appeared in *The Times* yesterday, Dr. Alex Hill compressed in tabloid form what everyone who is experienced in University life knows well to be true: "Where there is no zeal for research there is no vitality in teaching."

This fundamental assumption we need not discuss to-day; for there is a narrower question based on it, but one of immediate practical importance especially to those whose activities in research and teaching are devoted to science.

Up to the outbreak of war scientific research was directed largely by the particular fancy of the worker. That must always be the dominating characteristic of research in pure science. The worker must be given a free hand.

But an important field of research work is in the direction of industrial development, and, for this Empire, especially having in view the utilization of our raw materials. Progress in these directions is essential for the maintenance of the Empire, whether in peace or war, and there is now very little difference between the two, for nine-tenths of the materials wanted by the modern soldier in the field are similar to those required for the maintenance of ordinary civilized activities.

Co-operation of the kind that I wish specially to speak of is that necessary for filling in the gaps in our industrial development, and to a less extent that required to prevent wasteful duplication of effort.

On various occasions, following the foundation of the Imperial Institute, suggestions were made for co-operation with the Colonial authorities and workers at home for investigating the nature and value of our raw materials in various British possessions. There was a distinct tendency in India for utilizing the services of specialists in the United Kingdom, but very little indeed on the part of the great Dominions who used the Imperial Institute mainly as a shop-window.

The War altered the established streams of international exchange of commodities, forcing us to rely largely on Empire products; and it brought home to everyone the alarming fact that, even with an abundance and an abundant variety of raw materials, a long process of investigation and experiment was necessary to turn the materials into suitable form for utilization.

One illustration is sufficient: the whole of the output of wolfram in South Burma, which was then the principal source of the mineral, was sent to Germany for the manufacture of the

metal tungsten, an essential constituent of tool steel; and from Germany English firms were rationed in pre-war years with limited amounts of the pure metal. Fortunately a few months of intensive research work under the compelling impetus of war demands enabled British metallurgists to establish a satisfactory process of manufacture and so to prevent one possible source of early disaster.

This was but one of the many shocks which followed the winter operations of 1914-15. We then learnt that the War was no ordinary military campaign, but was a competition to death of science and technology in an intensive form.

Early in May of 1915 the principal scientific bodies in London, headed by the Royal Society, urged on the Government the necessity of tackling our difficulties in systematic form, and in the following month the Government announced its decision to establish a permanent organization for the promotion of scientific and industrial research. A special Committee of the Privy Council formulated a programme of work through an Advisory Council of distinguished scientific men, who decided, because of the immediate necessities of the time, to give science in its application to industry precedence over pure science.

Soon after the establishment of this organization in England, a suggestion came from Australia that similar activities should be inaugurated in the principal Dominions, accompanied by co-operation throughout the Empire. The Committee of the Privy Council promptly took up the suggestion and pointed out how the Australian suggestion could be turned to practical account, with the establishment in each Dominion of an authoritative body like that established at home; they showed how an organization of the sort would react on the educational work of the Universities in which the research workers are mainly trained, and they indicated the necessity of having in London some sort of clearing-house and information bureau.

Under various names, and with different degrees of promptitude, India and the Dominions then proceeded to create organizations intended to co-ordinate and assist research activities: all of them formed institutions required to meet the immediate war demands.

The unusual independence of the Australian States, with great distances between the main centres of scientific activity, caused some delay in the Commonwealth. The Australian National Research Council did not begin its first session until August 1921, and its operations even then were restricted for want of funds until after Mr Bruce's return from the Imperial Economic

Conference in 1924, when he arranged a conference to discuss further expansion, supported by materially increased funds.

In Canada an Advisory Council was formally constituted by an Act which was passed in August 1917, and fuller powers were granted by legislation in July 1924, when, by an Act of the Dominion Parliament, the duties were defined in a way that might well be quoted, as it resembles the scope defined for most of the Dominions: "The duties of the Council shall include the charge of all matters affecting science and industrial research in Canada which may be assigned to it, and also the duty of advising the Committee of the Privy Council on Scientific and Industrial Research on questions of scientific and technological methods affecting the expansion of Canadian industries or the utilization of the natural resources of Canada."

In South Africa the duties of the Industries Advisory Board, established in May 1917, were taken over by the new Department of Mines and Industries in 1923, and this Department's functions resemble those of the Scientific and Industrial Research Department in this country by providing for co-ordination within the Union, with the adjoining Protectorates and with institutions overseas.

New Zealand established similar official machinery in 1917.

In India, where the research activities were mainly conducted by purely official departments under Government up to about a dozen years ago, co-operation was ensured by a Board composed of the heads of these departments from 1903, and was continued under the Munitions Board during the War. Meanwhile, independent research work began to develop in various Universities and Colleges, and this activity was fostered by an annual Science Congress dating from 1912. The administrative reforms prescribed by the Government of India Act of 1919 gave extended powers to the Local Governments and, consequently, a tendency to shed off the central control of scientific officers accompanied by other forms of provincialization. The change must necessarily result in a temporary decrease in mere efficiency, but it is possible still for a scheme of co-operation between provincial workers to turn local patriotism to account.

To complete the framework of Empire organization the present Government authorized last year the formation of a sort of super-committee, the Committee of Civil Research, which is analogous in principle and functions to the Committee of Imperial Defence, and, like it, is an Advisory Body with no administrative and executive functions. This Committee, over which the Prime Minister presides, is charged with the duty of giving

connected forethought from a central Imperial standpoint to the development of economic, scientific, and statistical research in relation to civil policy and administration. It will also indicate new areas in which inquiry might profitably be undertaken.

On the analogy of the Committee of Imperial Defence, this new Committee will not be constant in composition, but may include, as and when required, specialists both private and official. It will deliberate on questions that cannot by themselves be dealt with by any single administrative department of Government, and it will thus form a responsible and authoritative medium of correlation in a way that would not be possible for any junior or voluntary association.

I have given a sketch of the official organizations for correlation and control, in order that we may be able to examine more intimately the question that concerns this Congress most directly, namely, the way in which official supervision and possibly direct official activity are likely to affect the interests of our Universities.

The Department of Scientific and Industrial Research in this country provides maintenance allowances for about 200 students who are carrying on research work as students in training. They also maintain some thirty to forty research assistants at University Colleges, and provide funds for their equipment and necessary expenses. Trades Research Associations are maintained partly by firms engaged in commercial industries and partly by grants of public funds made through the Department. Some of the activities of these associations are carried on in University institutions.

But there are other activities that have no connexion whatever with University institutions, such as the Geological Survey, the National Physical Laboratory and some special laboratories, such as the Fuel Research Station at Greenwich, built mainly for larger-scale operations that are beyond the capacity of University Colleges. These institutions absorb by far the larger part of an annual expenditure of nearly half a million.

We thus come up against a possible development that may affect the interests of the Universities, namely, the expenditure of public funds on special institutes for research, wholly separate from teaching. We may all agree that teaching loses its vitality if unconnected with research, but to what extent and in what directions does research suffer if divorced from teaching?

Obviously, certain forms of research must be conducted on a scale that is beyond the capacity of the ordinary University College; but there is a natural tendency in all such institutions

to extend their operations, and so to displace the kind of work which could be done as well and less expensively in our College laboratories.

Everyone who has followed the operations of the Department of Scientific and Industrial Research in this country will admit that any tendency to trespass on University interests or to displace them by purely official activities has never so shown itself, and indeed the organization itself provides for suitable and sufficient safeguards. The work of the Department is supervised by a body in which active professors always form a section. Special institutions established for departmental work are also under the control of representative Boards, who are able to distinguish between those parts of the work that can be carried on in established laboratories and those that necessitate executive official action.

But an additional and obviously greater danger must follow the creation of central, compound, or general research institutes such as appears to be contemplated in Canada, and such as we have had hitherto in our Imperial Institute. Research workers have always more ideas in their heads than they can readily develop and complete in practice. They always hope to find time to work out problems for which they feel an inspiration, and they naturally hesitate to pass them on to others. This influence of normal human nature is relatively harmless in a specialized institute; for when a deferred problem is tackled, it is worked out thoroughly. But the temptation to reserve a "claim" is stronger in a general institute, and its resultant dangers are more serious; for its governing body represents ordinarily the financial interests which support the institute, instead of being composed of critical specialists.

When a special research institute is built for operations of an executive nature carried on by Government officials, fears are often expressed that University research work must necessarily suffer, and that some research problems must inevitably be delayed through absence of the competitive spur.

The dangers are not apparent in this country so far. The new Department has shown a readiness to hand over its problems to research workers in University laboratories, and has shown a willingness to assist new researches proposed by our University professors. I have given in outline, necessarily bare and brief, a sketch of the organizations recently created for correlating research activities, in the hope that our Universities may be able to take advantage of them and, by discussion, to suggest means for removing their shortcomings.

I have avoided all reference to the work of the voluntary scientific societies and to the specialized Imperial Bureaux which have been established in London by co-operative support among British countries merely or mainly to collect and distribute information. These in no way trespass on University activities. The questions of obvious importance to us fall into two groups:

- (1) Does the establishment of Government laboratories tend to supplant University functions? And,
- (2) Can the Universities take further advantage of the new official machinery for correlation and financial support?

To the first question the answer seems to be favourable so far as this country is concerned. Regarding the second question, we have found at the Imperial College a ready response to our suggestions for research work and a willingness to render the necessary financial assistance to research workers. Discussion at this Congress may show in what ways we can assist still further to utilize the awakened spirit.

SIR JOHN FARMER (Imperial College): Co-operation in research, in so far as the Universities are concerned, is sure of abundant advocacy, both of a direct and indirect nature, and I am well content to leave it in other and abler hands.

But we ought not to lose sight, in stressing the advantages of inter-University co-operation, of another aspect of the whole matter that very closely concerns Universities, though I venture to think it is not so much to the front as it deserves. It is to this aspect of the problem, then, that I propose mainly to limit my remarks, in order to press the claims of a class of scientific men working under very diverse conditions, in which the only feature common to all is that of greater or less scientific isolation. I am referring to the scientific officers attached to the agricultural departments in the Colonies, as well as those who are attached in a similar capacity to the larger commercial agricultural enterprises which are growing up especially in the Tropics. Many, indeed the great majority, of these men are alumni of our Universities, and it specially behoves the latter to maintain a sympathetic and, what is more to the point, a sustained and actively helpful attitude towards those who have gone forth from among us to further, by their scientific research and advice, the material resources of the Empire as a whole. Out of sight out of mind is too often their lot, or at least they are apt to think it is, in so far as the recognition of their work by our centres of learning at home is concerned. As a class their claims for

organized help are great, but those who are prepared effectively to attempt to voice their claims are too few. They are sometimes hampered by imperfect equipment and scanty resources, and they are usually far away from libraries where they could keep abreast of progress. Of course, this is the almost inevitable lot of the pioneer abroad, though it does not prevent some of them from achieving success and winning, well-deserved distinction—far from it, for difficulties do but test the metal of the man.

It happens that I have a somewhat large acquaintance with these research officers, so I may fairly claim to have had opportunities of sampling the services as a whole. And I say confidently that these services contain a large proportion of really magnificent material, but I also assert that we on our side do not do enough to help them to develop the best that is in them. We have turned them out fitted to start on their jobs, and the founding of post-graduate scholarships by the Empire Cotton Growing Corporation, as well as by the Colonial Office, have greatly extended their chances of first-rate training, but it is up to us at home not to be content with this. However well started they may be, they are almost bound to lose outlook and to get stale if left to themselves. I do not underrate the difficulties in the way of giving practical and useful help—I am only too well aware of them—nor do I wish to be understood as suggesting that the Government Offices and some, at any rate, of the commercial enterprises concerned have been lacking in efforts on behalf of the men. The services are good, and they are getting better, both as regards pay, leave, and possibilities of advancement. But the fact remains that the fertilizing effects of intercourse with others who are pursuing similar or analogous paths of scientific work is a great deal too much wanting, and many of the best men feel this acutely. Something more can be done in the way of conferences, such as the Imperial Botanical Conference that was held in London two years ago. It was well attended by the class of men of which I am speaking, and the results were worth far more than all the effort and expense involved. Again, a good deal more could usefully be done in promoting local interchange of ideas, whether by conferences or otherwise, amongst men whose work lies in kindred spheres and in natural geographical areas, for example, the Colonies grouped as West African, or those similarly grouped as East African. The establishment of central higher-research stations, such as that contemplated for Amani for East Africa, should prove of immense value from the point of view now under consideration.

Of course it will not be easy to surmount all difficulties, but such promotion of intercourse would go a long way to improve efficiency as well as helping to remove the psychologically evil effects of aloneness.

But there are at least three ways in which the home Universities could be helpful. The first is to let it be understood that any of these men when on leave will be cordially welcomed as a guest in our various University laboratories, and this should be interpreted really liberally, for surely no one has a better right to this hospitality than the man who has been coping with problems under conditions of difficulty that would often astonish those who have always been used to the luxurious resources of some of our modern temples of science. A second way in which University departments could help would be by sending separates of their published papers. Here again there is a psychological value which is not to be measured in precise terms of the scientific or economic importance of the paper itself. The third, and perhaps not the easiest of all, is for the people at home to *keep in touch* with those that have gone out from among them. Apart from its human value it essentially is true that such interchange "blesseth him that gives, and him that takes," for those at home would thus be kept in first-hand contact with the various problems that are facing the industry of tropical production, whilst the officer abroad could, as we may hope, profitably discuss his difficulties with those of us who are in some respects more favourably placed from the point of view of providing available information and, it may be, of giving useful suggestions. If this sounds impracticable, at least it may be urged that its supposed impracticability is for the most part due to laziness or to lack of imaginative sympathy and initiative.

I think, if I may judge from what men have actually told me, that most of them do value such efforts, and although I know it is done by some people, I am quite sure it is not done enough.

As regards the more definitely organized help which can be given to the scientific staffs abroad, it is to be hoped and expected that the recently reorganized Imperial Institute will play an important part. It possesses ample opportunities for collecting, collating, and evaluating the contributions made to economic scientific research, and so of placing the results in the hands of workers whose lot is cast in places remote from libraries. Thus the Imperial Institute should be the natural means of providing very material and important help to anyone needing to know what has already been done in any field of investigation on which he has to enter.

The admirable publications of the Bureaux of Entomology and of Mycology, respectively, fill the gap to some extent, but there are many other branches of inquiry, both scientific and economic, which lie entirely outside their scope, and on which the Imperial Institute should be in a position to supply information when so desired.

Reverting again to the main theme; even if the suggested larger scientific establishments (forming a series of higher-research centres, such as that talked about in respect of Amani for East Africa) should materialize, there will still be a need for the kind of help which the Universities can best provide. There is always a real danger in research specially directed to secure practical results of anticipated commercial value. The general tends to be swamped by the particular. It is so easy to lose the true perspective of values in the natural desire to concentrate on the necessities of the moment. To keep a proper balance is not easy, and a kindly help from the Universities may be welcome, provided only that it is offered with the discretion that real contact should ensure. At the moment it must be said that the Universities themselves have something to learn, for as a body they seem to be hardly alive to the full importance of this great development which is going on in tropical agriculture. The splendid opportunities that lie open to young men of grit and brains are year by year being passed over, and men of first-rate promise are being allowed to drift off into relatively unremunerative or over-stocked professions at home, instead of seeking the ample opportunities of scientific work in connexion with the great tropical industries abroad. For in them, in spite of certain disadvantages to which I have specially alluded, and indeed have pressed on your attention with the object of removing them, there are increasing chances for fine careers which incidentally hold out solid advantages in the matter of pay, coupled with the certainty of doing good and useful work.

But the important thing to get hold of in all this matter is that it is to the Universities, as the fountain-heads of research and all this stands for, that we should look for further inspiration and help in promoting the advance of knowledge, so important in connexion with the fuller development of the resources of the Empire as a whole, and especially of agriculture, which is of far greater importance than all other industries put together, whether we regard it from the standpoint of actual monetary value or from the number of persons actually engaged in it.

Although I have chosen to devote the time allotted to me

mainly to the consideration of the need for closer co-operation and organization of research and all it stands for in one great imperial industry, I cannot omit a reference (which must be brief and inadequate) to the great advances due to considered and strenuous effort in our own land: The real co-operation of science with industrial undertakings has many ramifications, but The National Physical Laboratory stands out as a big landmark, and indicates a great pioneer movement in real co-operation in research in this country. Again, towards the close of the Great War another great organized effort was made, leading to the establishment of The Department of Scientific and Industrial Research. This organization has, *inter alia*, established investigation and research Boards to deal with groups of problems for which adequate provision did not exist though the objects they were brought into existence to serve were clamant. I shall only refer here to one of these Boards, that known as the Food Investigation Board, which is under the able direction of Sir William Hardy. And if I stress this particular one I do so because in its planning and in its growth it so admirably illustrates the importance and wisdom of co-operation with the Universities on the one hand, and with the complicated series of industries which it serves on the other. Scientifically it is mainly rooted in Cambridge, though it has also an additional though smaller root system in London. And the essence of its success—for it is very eminently successful—seems to me to find an explanation in the completeness of the chain of co-operation between the highest science and the problems of the industry. The *ad hoc* methods of investigation are not unduly to the front, but going on behind them, and paving the way for further advances, is a big series of researches on the scientific principles that really underlie the business problems. This is the *highest* type of co-operation where the fundamental (but apparently unimportant from a business point of view)—the *fundamental* scientific problems are investigated as problems *per se*. It is only when one surveys the work as a whole that one comprehends the skill with which the different links in the whole chain have been integrated into a single consistent co-operative scheme—and one that really works.

The instance to which I have just briefly alluded represents one—and a very successful one—of the Department's offspring. But without co-operation from many sides a large-scale research, in connexion with complex industrial problems, may easily be relatively fruitless. Even the Department itself would have

to confess to some results that have not, from various causes, come up to expectation. This, however, does not affect the important truth that, as in other walks of life, so also in attempts at organized co-operation in research, whether in pure or applied science, very skilful handling is necessary if success is to follow. There are real dangers in so-called team work, and it is possible through lack of vision and skill in management to destroy what ought to be a success. We are an individualistic people on the whole, and if we are true to our genius we shall perhaps be best content to remain so. Scientific people are said to share—some say unduly so—this quality. Anyhow it exists, and the snaffle rather than the curb is the better bit for the rider to use. We should always have a care not to destroy the priceless gifts of originality, by attempting to run them within the confines of a too rigidly conceived system of team work, even though we may disguise it under the blessed label of co-operation.

SIR ARTHUR E. SHIPLEY (Chairman of the Governing Body of the Imperial College of Tropical Agriculture): Sir John Farmer has already said much that I wished to say. The opener of the debate dwelt on the large Colonies and self-governing Dominions; I wish to speak of the Tropics, of the small islands which are controlled by the Colonial Office. And here I want to pay a tribute to that Office. In the last twenty years, since the time of Joseph Chamberlain, our administrators have awakened up. It was due to them that the Bureau of Entomology was established, a Bureau which abstracts no less than 1600 periodicals and scatters these abstracts throughout the world. Following on that came the Bureau of Mycology, which does for fungi what the other organization does for insects. There is nothing like them in any other country. Recently the Colonial Office, led at first by Lord Milner and carried on by Lord Lovat, has opened up a very much improved service of agricultural officers, and they have materially helped our work in the establishment of the Imperial College of Tropical Agriculture of Trinidad. The generosity of the merchants of Trinidad enabled us to place that institution in their island, but the Government has backed us up and has given us large sums out of the imperial revenue. At the College last year we had thirty-five students; this year we shall have over fifty from Cambridge and Oxford and the College of Science in London, a few from the West Indies, and some from South America. It is almost the only teaching college in the Tropics—of course there is Khartoum, but that is largely for the natives. In Mauritius, again, we

have another teaching college, but that is limited by the fact that all the teaching is done in French. There is nothing like Trinidad except these two outside the Empire. We deal with everything, such as coffee, cocoa, sugar, tobacco, rubber—in fact you cannot get on without the Tropics, which are increasingly becoming a great food supply for those who live in temperate climates.

Last year there were imported 60,000,000 bunches of bananas, and, as each bunch has about 80 bananas on it, the inhabitants of the United Kingdom get about 100 bananas a head a year. If we could only exterminate the banana disease, what a blessing it would be. Many of the plantations are derelict because of the disease. Anyone who could find a cure for the fungus which destroys the bananas would make an absolute fortune. We must establish a Banana Station, just as we have established a Cotton Station. The cotton industry has backed us up in the most generous and intelligent way. They send all their pupils to us and take the keenest interest in this work.

We are provided with periodicals for dealing with insects and fungi, but not for the average agricultural work which is going on, and one of the things that ought to come out of this Conference is the backing up of the Colonial Office in their desire to produce a periodical which will be disseminated amongst all workers and which will contain the results of the work carried on all over the British Empire and elsewhere. In co-ordinating all this we have a great friend in Mr Amery, and a great friend and traveller in Mr Ormsby Gore. We are pulling the Colonies together. Only recently the Gold Coast (which is making enormous sums out of cocoa) and Nigeria have joined the West Indies in contributing to the Imperial College at Trinidad. All this makes for co-operation. They do not give us their money without looking into what we are doing and finding out what we are aiming at.

DR BALFOUR (London School of Hygiene and Tropical Medicine): Considerable acquaintance with many of our tropical colonies and dependencies, more especially those situated in Africa, visits paid to Canada, South Africa, and India, and a long familiarity with the literature of tropical medicine and hygiene have impressed upon me the need for co-operation in research throughout the Empire. The subject is a most interesting one, but the whole question bristles with difficulties and accordingly requires very careful and sympathetic consideration.

In the short time at my disposal to-day I can merely touch

upon some of its aspects and will, in the main, confine myself to a consideration of how co-operation can best be effected in the case of laboratory and other inquiries directed to the subjects with which I have been more intimately concerned. There can be no doubt that at present much time is wasted, energy dissipated, and money thrown away owing to the fact that in the great and important domain of tropical medicine men are, to a large extent, working in watertight compartments. It is true that things are better than they were, for that useful and, indeed, invaluable publication, the *Tropical Diseases Bulletin*, a Colonial Office publication, does serve to make one worker conversant with the research of another. This, however, only meets part of the difficulty. It is rather like shutting the stable door when the steed has been stolen, and what is really required is some organization which can consider and lay down lines of research work, which need not appear immediately profitable, follow up what is done and decide, not only what results are worth recording in the literature, but how best they can be recorded. So far as I know, India is the only part of the British Empire in the Tropics where anything has been accomplished in this direction. There, so far as laboratory work is concerned, a scheme is in force whereby the Scientific Advisory Board, consisting of the Director-General of the Indian Medical Service, the Public Health Commissioner to the Government of India, and the Director of major laboratories meet several times a year to consider the medical and sanitary research work which is being carried on throughout the length and breadth of the Peninsula and to discuss lines of future progress. This Board can also at any time be addressed by circular note from the research laboratories. I may say that the all-important financial side of the question has not been neglected, for the Indian Research Fund Association, which controls the monetary resources, will not allot money without obtaining the opinion of the Board.

What is lacking now is that there is no link between this Indian Scientific Advisory Board and any society or institution in this country. I understand from Colonel J. D. Graham—the Public Health Commissioner—that the want of some such liaison is badly felt and that it is highly desirable that the Indian Board should be in touch with some body like the Medical Research Council. At the same time, it must be remembered that the Medical Research Council, which has accomplished so much that is admirable and useful in this country, has not yet, to any great degree, extended its activities to questions of tropical import, and from its constitution is not at present in a position

to deal with them except in the case of problems which are common to both temperate and tropical climates, though, believe me, there are many such and they are increasing every day. It is indeed curious that while the Indian Board now works in co-operation with the League of Nations, it is not officially in touch with scientific activities in the Mother Country.

This anomaly should certainly be remedied, but, after all, India is only one portion of the Empire, and I submit that it is desirable, indeed essential, to frame some scheme whereby there will be in London a central organization to consider and put forward suggestions for exploration, to keep in touch with and encourage the workers themselves, to collate and disseminate information, and, above all, perhaps, to arrange for the selection and training of personnel. This question of personnel is most important at the present time, more especially in the great field of bacteriology, and it seems to me that the organization proposed might not only arrange for the selection and training of the workers but advise as to where they might best be placed and how useful exchanges should be effected. Let me say here (in parenthesis) that I fully recognize that there is a type of born research worker who, in some respects, is best left alone to work out his own salvation and incidentally, perhaps, that of other people.

I admit there are many difficulties, but I do not see why they should not be overcome, especially if the Medical Research Council, which has always shown itself sympathetic towards research in all parts of the Empire, forms the nucleus of such an organization. A comparatively small expansion of its existing staff and resources would enable it to serve as that nucleus and, in close touch with the India, Colonial, and Foreign Offices, for it must not be forgotten that the Anglo-Egyptian Sudan with its manifold problems and vast possibilities comes under Foreign Office control, to stimulate and guide medical research throughout the whole of the British tropics.

A recent hopeful development which should make the realization of some such scheme simpler and easier is the long overdue appointment at the Colonial Office of a Chief Medical Adviser to the Secretary of State. It is very fortunate that Dr A. T. Stanton, who has been selected, has himself been so closely associated with research work, in which, indeed, he won his spurs, and if only there be attached to him those liaison officers for whom Dr Scott and I pleaded in our *Health Problems of the Empire*, we may look forward to a group of medical workers at the Colonial Office itself which, in close touch with the Imperial

Research Council, or whatever it may be called, would be able to render assistance of the greatest value, particularly in the way of supplying expert and up-to-date information.

Yet another most hopeful development is the establishment of the Committee of Civil Research, to which Sir Thomas Holland has referred, which owes its existence to Lord Balfour, and which has already concerned itself with research work in the Tropics. This Committee, or at least part of it, would, I take it, be associated with the Council I have in mind. Whether or not the Council charged with paternal duties as regards medical research work in the British tropics should form part of a larger body safeguarding and guiding the same interests in the Empire as a whole is a big question on which I can scarcely express an opinion. Nor is it possible for me to consider the still larger question of the desirability of uniting medical with other forms of research and placing all under central control.

I would rather say a few words about the situation in our African Colonies. In doing so I propose to widen a little the scope of the argument and to consider research work generally, not merely that devoted to tropical medicine and hygiene.

I have for some time held the view that there should be in each of our Colonies a Department of Research, just as there is a Department of Public Works or a Legal Department. So much depends nowadays upon research that it merits such recognition, and the establishment of a separate department devoted to it in all its branches—medical, veterinary, agricultural, forestry, botanical, geological, and so forth—would prevent much dissipation of energy and of money, while knowledge would be co-ordinated for the benefit of the territory concerned. Again I admit there are difficulties. There is the difficulty of obtaining funds for the capital outlay required. It perhaps might be met by grouping Colonies together and having a central institute common to all. This should be feasible on the West Coast, where their geographical distribution favours such an arrangement, while on the East side of the Dark Continent, Uganda, Kenya, Tanganyika, and Nyasaland are already in close touch, although it is true that a recent attempt at co-ordination of veterinary interests has unfortunately not been crowned with success. The Sudan stands more or less by itself, though in the matter of sleeping-sickness it has intimate relations, or, at least, should have intimate relations with Uganda. The two Rhodesias might unite their forces to advantage, for both now come under the Colonial Office.

A greater and graver difficulty is to find the right type of man

to place at the head of any institute garnering and correlating all types of research within its walls. I need not enlarge on the qualities required. They are those which every experienced administrator must possess, while, if the Director be not a scientific man himself, he must have a wide sympathy with Science, recognise its importance, and be familiar with its possibilities, and especially its local possibilities. Other difficulties which will suggest themselves arise from professional and departmental jealousies: the fact that a research agriculturist, let us say, might not care to conduct research under the guidance of one who may have earned distinction in some other branch of science, and the clashing of the interests of the several territories which the central institute will serve. However, if we are going to be deterred by difficulties no progress will ever be made, and we will muddle along as at present, no doubt accomplishing a good deal, but falling far short of what might be done and, in the effort, wasting, as I have said, time, energy, and money. If it is quite impossible to permit Research (and I spell the word with a capital) to stand on its own legs, I do not see why, in each Colony or group of Colonies, it should not be placed under one already existing neutral department of Government. There is only one such which, as it were, stands aloof and yet is intimately associated with every line of research work. That department is the Department of Education. I was privileged for a period of years to see what could be done by a Director of Education big enough and strong enough and wise enough to gather almost all the research activities of a huge and rapidly developing African territory under his sway. I think, on the whole, the experiment, as it was at the beginning, proved successful, but, alas! there are not many Sir James Curries, and few of our African possessions have the facilities which the Anglo-Egyptian Sudan could boast even in its early days. Still education, which may be the root of all good or the root of all evil in Africa, according to the way it is handled, would itself benefit immensely if given the dignity and importance of being linked up with all the research activities of those lands where it is endeavouring, at present usually in a very meagre and lowly manner, to make the native a better and a wiser and, incidentally, a healthier citizen. I use the word "healthier" advisedly, for, without education of some kind, health measures will not get very far.

Let me conclude by saying that when the new building of the London School of Hygiene and Tropical Medicine, a school of the University of London, is completed, that institution should

certainly be able to play its part in co-ordinating and assisting medical and hygienic research throughout the Empire. Provision has been made for research workers from abroad, not only from the Tropics but from the great self-governing Dominions. Already the School is in touch with many workers abroad, and it is hoped to extend this side of its activities and to establish useful liaisons in various directions. The School, therefore, should become one of the weapons with which the Central Research Institute in London would wage war on ignorance and improve our position in the battle-line against those disturbing and disintegrating factors which militate against progress and which, unless they be combated, will help our rivals to secure a victory which our resources, properly exploited, should and can render secure.

I feel I owe an apology for these somewhat disjointed remarks. They have been put together in some haste at a time when other work was pressing unduly, but I hope that they may at least form a basis for the discussion of some aspects of a huge and complicated subject.

SIR JAGADIS CHANDRA BOSE (Calcutta): The subject of discussion this morning being the Advance of Knowledge by Co-operation, I think that I shall perhaps be asked in what way the East can co-operate with the West. How can the two combine their mutual genius for the advancement of knowledge for the common benefit of humanity?

I need hardly say that it is quite wrong to think that the world owes its advance in knowledge to any particular race. As a matter of fact the whole world is interdependent, and it is the consciousness of our mutual dependence which has ensured the continuity of civilization. Though science is neither of the West nor of the East, but universal, yet India by her habit of mind and by the inherited gifts handed down from generation to generation is perhaps fitted in a certain way to advance knowledge. The budding Indian imagination which can extort truth out of a mass of apparently disconnected facts can also be held in control by our power of meditation; and imagination has at all times to be kept under control and tested by experimental methods, otherwise it may lead to the wildest speculation which is subversive of all intellectual progress.

In our culture there have always been two elements: one frankly sceptical, which would not accept anything which was not demonstrated by actual experimental demonstration, the other speculative; and there has never been any real conflict

in India between religion and knowledge, for knowledge was regarded as religion itself, so that any man who pursued knowledge regarded himself as dedicated to a sort of religious life.

Now, in the advance of knowledge two other factors also play their parts. Firstly, the power of invention. Many of the phenomena which underlie all the functions of life are in regions which are beyond our means of direct perception. It is therefore necessary to invent apparatus of extraordinary delicacy, so that the realm of the invisible may be explored. But even when we have invented apparatus of great sensitiveness, it is still necessary to possess the second factor, the power of controlling one's hands and great facility in adjusting the apparatus.

In India we combine all these qualities—inner vision, power of invention, control of our hands. But there is yet another factor without which nothing is of any avail, and that is the realisation that Man is a creating being; that by merely willing he can make the impossible possible. That is the important thing. We are often thwarted by various ideas which we think important; we are thwarted by practical impossibilities; we realize that what is to be done must be done to-day or to-morrow; and by the power of will we can bring anything into existence.

I will tell you a short story of my experience when I first entered the Presidency College in Calcutta. At that time the official view was that the Indian mind was purely metaphysical, that it was incapable of accuracy; positive knowledge was beyond the East. To show that it was not so I may say that, even if this capacity had been found in India, we had no laboratory, no place of scientific investigation. When I entered the College there were no instruments, no instrument-makers; and everyone said that scientific work in these conditions was an impossibility. But there were tinsmiths and this indomitable mind. And I think that India must have been conscious of the great traditions of her past which, twenty-five centuries ago, established the greatest Universities the world ever saw—one in the north, at Taxila, and one at Nalanda,—and it was in these places that we anticipated the ideals now prevailing at Geneva. We welcomed scholars from all parts of the world, fed them and educated them, and regarded them as part of the country. Any stranger who crossed the border was regarded as the guest of the nation, with all the advantages of training in these large Universities. Within a short time, though we had no apparatus makers, I took ordinary men into my confidence and inspired them with the idea of trying to improve, and in a short time

those instruments, by means of which we have been able to find the secret of life in the activities of a single cell, all these were visualized. These instruments are of such delicacy that at one time it was thought impossible to manufacture them, but they were all made by ordinary mechanics to whom I gave the idea of attempting something for suffering humanity. Later on I was joined by Sir P. C. Rây who took up the work in chemistry, and within three decades, absolutely out of nothing, we produced a band of men who have made a profound mark on Science. We have produced one of the greatest chemists, one of the greatest astro-physicists, etc. Even now the University of Calcutta, whose delegate I am, and of which I am a graduate, is labouring under very great difficulties in its efforts to advance human knowledge. Yet so much has been done in thirty years that for the future we have nothing but faith—faith that India will win her proper place among the intellectual nations of the world.

SIR P. C. RÂY: I shall just confine myself to a few practical suggestions in explanation of what has been so ably put by Sir Thomas Holland. Let me draw your attention to the title of the discussion: "Co-operation in Research throughout the Empire." India is the only country which gives the title of Empire to the countries which own the sway of this island, and, as a representative of one of her Universities, I would point out that since Sir Thomas Holland left India there has been steady progress in the development of physical science. Not only during his term of service, but the moment of his departure synchronizes with activity in the domain of chemical research. My distinguished colleague for more than a quarter of a century in another department has aptly proved the development. Sir Thomas Holland, as President of the Industrial Commission, laid it down as an axiom that as soon as possible India should be made self-contained and, with that view, his Commission proposed various recommendations.

There is a good deal of wastage of work in India. There is the work carried on under strict bureaucratic control, and the work carried on by some of the Universities who have enlisted the services of competent researchers. There should be no overlapping. I signed the minority report of the Chemical Service Committee, in which I opposed the carrying on of research work for industrial purposes under the control of the bureaucracy. In this country you boast that the Universities are the seminaries of intellectual activity, and any effort to suppress the activities of the Universities would be strongly protested

against and condemned. I plead for proper recognition of the Universities in this work because at present, as I said, a good deal of the work is being indifferently carried on. All should be brought under some kind of co-operation. Why should not Indians be invited to co-operate with the Government? Why should the chemical warfare service be kept a close preserve? In the department of chemical research Indians of approved ability should be invited to co-operate. I speak under some restraint on this matter; I might say that trust begets trust. There is a good deal of difficulty for Indians in getting into the services, and that is a stumbling-block to progress, for a large number of students of chemistry are making their position felt. We have dozens who have their D.Sc., not only in India but in this country, and, unless they are given scope for work, it will be difficult for us to ensure the progress of chemistry.

So I appeal strongly that some suggestions may be sent to the Government of India enlisting their active co-operation for the cause of chemical research. India is an integral part of the Empire. Minus India where would the Empire be? Why should we not be allowed to join? Circumstances compelled us to be in the leading strings of bureaucracy for a long time, but we have outgrown our childhood and should be allowed to develop in our own way.

PANDIT RAM HUSEID TRIPATHI (Allahabad): So far the speakers have devoted themselves almost exclusively to the industrial and commercial research of the Empire, but I think that the subject is wide enough to include researches in social and mental science, and the interest which the study of social science has created, not only in India but elsewhere, gives it a claim to be considered seriously by any organization which is thinking of co-ordinating research in the Empire.

I personally am not acquainted with all the aspects of the social sciences, but I think such studies as anthropology, sociology, and certain aspects of economics, besides commercial and industrial research, may also be included within the purview of our inquiries and investigations.

From an inquiry connected with the study of history in one of the Universities I think I can say in which direction improvements are necessary. In India at present there are numerous Universities; every Province has one, and my Province can boast of four. A fifth may grow up in it, not improbably next year. Universities are cropping up in our country at a rapid pace. Consequently, the question in India is serious because,

if at this stage we lay down certain plan to co-ordinate the work of the various Universities, there would be much saving of time and energy. As you know, almost all the Universities in India depend largely on Government support. Therefore it is still more necessary to economize the resources of the country as far as possible. I know from personal experience that between these various Universities, in historical studies, there has not been any serious effort to co-ordinate their work. I am very glad to note, particularly from the remarks of Sir Thomas Holland and Dr Andrew Balfour, that India has been doing a good deal towards the co-ordination of research work on certain specific lines. I think the time has come when that activity might reasonably be extended.

I would suggest that every University should issue periodically some bulletin of the particular lines in which researches are being carried on, and these bulletins should be circulated to all the Universities of India as well as other parts of the Empire. Then the provincial Governments could help these various Universities in organizing more or less a Central Provincial Bureau, which should be in touch with the All-India Bureau. In this I am sure the provincial Governments as well as the central Government should combine. There also ought to be a central bureau in London, through which any member who wants to get into touch with others who are carrying on researches in the same field should have facilities of communication. This central bureau in London should put that man into touch with all the other men who are working on similar lines. This would prevent duplication of work.

In one respect, particularly, there is room for improvement—the distributing of scholarships for those who are carrying on researches and have reached a stage when it is necessary for them to travel and to go to other seats of learning. Scholarship facilities should be given partly by the Universities and partly by the provincial and, if necessary, by the central Government to enable such students to put the finishing touches to their work. In some of the British Universities there are travelling scholarships, and post-graduate advanced students are sent out to get into touch with various Universities and particular people. I see no reason why such scholarships should not be introduced into our country. It is very well known that the Universities depend largely on Government aid, and it is through the Government that the thing can be done with ease and quickly.

If these suggestions are duly considered, I think it would be

possible to throw a flood of light on Indian civilization, both in its historical and its intellectual aspect; and this would lead to a better understanding of the Indian people and would help in solving questions of practical interest.

RAI BHADUR PANDIT SHEO NARAIN (Panjab): I must confess that I do not belong to any scientific department, but there is one fact I wish to bring to the attention of the audience.

As I understand the word "co-operation," I take it to be somewhat of this nature. Here is a student pursuing a particular theory by way of research—a word which is wide enough to include any research—but he has certain difficulties. Suppose he has advanced to a stage from which he cannot get further. There should be a place where he can ask for assistance. If his request is responded to that is "co-operation." If you issue bulletins of the work you are doing, that is not co-operation; it is independent action.

The suggestion I would advocate is that co-operation should take this form: wherever researchers are at work they should appeal to one another to respond and devote their labour also to help fellow research-workers. Let me give one instance.

My University controls many departments, and, unlike the United Provinces Universities, is the single University for the Province. It has an agricultural college where there is a farm at which they work on all kinds of cereals and seeds from all parts of the world. When I once paid that College a visit, a zemindar was said to have brought in some corn—in this case it was wheat—and said his land did not produce anything. It was examined microscopically and a parasite was discovered. The principal told the agriculturist that he should take seed from the College and sow it; that he must come next year to report the result. Next year he had a bumper crop. That wheat is preserved to show visitors what are the parasites which retard growth. If there is need for an examination of any particular thing, the professors request the aid of the professors of the Government College Laboratory; and they get further information. In this way a great deal of useful work is progressing, the kinds of cotton and wheat produced in my Province are daily improving.

That is my idea of co-operation; and if there is a central place where various branches of research are maintained, people working on independent lines will ask for their assistance; if they respond, there is actual co-operation. I believe that in the British Empire India should be connected in that respect,

the more so because there is such a variety of products in India which are not available in other parts of the Empire.

PROFESSOR DAKIN (Liverpool): I do not intend to take up your time more than a few moments, but I feel that a word should perhaps be said in regard to the Government Department of Scientific and Industrial Research, and research in the Universities. Letting it pass by and not stressing it might seem to indicate that it was relatively unimportant.

It seems to me that in our desire to co-operate on a large scale we must not forget the tremendous advantage of keeping our research going in the Universities. We have been told, and all who are engaged in research in the Universities realize it, of the tremendous importance of the combination of teaching and research. Besides that, many of us in the Universities have scratched along our own special lines, and so, in looking at the Universities of the Empire, you see in this one or that some special branch which is being pushed and pushed ever further. I might mention one little branch at Liverpool—oceanography. I think it is the only Department and Professorship in the British Empire. Now, at the present time, we can ask the Department for Scientific and Industrial Research in England for grants, and the importance of that, I think, cannot be over-estimated. What I want to suggest is that, in the future, those grants should be increased, not decreased, as one sometimes fears will happen. The Department for Scientific and Industrial Research is a central body, and it knows what is going on in the different Universities. In addition to handing out grants, it can suggest to Universities that certain ideas might be taken up. There is no compulsion; the ideas might not be taken up, but the suggestions would be valued, just as the grants are always valued! Other bodies have not the money just now. In this way researches might be carried on in independent institutions with all the co-operation that is perhaps desirable. Overlapping would be prevented and ideas shared.

I should like also to mention a point which I raised at the last conference, when I returned after seven years in Western Australia. One consistently hears from science professors in the Colonies that they are out of touch with things. One of the ways of keeping in touch is by means of a good up-to-date library, by noting the literature which should arrive regularly and frequently. But these Colonial Universities often lack the large grants for libraries which are essential.

During the five years I have been in England, I have received more separate copies of published papers from other researchers than I ever received in the ten years I was in Western Australia, and I am in a place where I scarcely need them. I have all the information in other publications in the library. The *separata* are often useful, but not essential. If all the workers who are carrying out research in this country and who are having material published would, in addition to sending copies of their research work to people who they know are interested, just try and make a point of sending copies to Universities or departmental libraries of other Universities in the Empire, we should achieve one kind of co-operation in research and it would be realized in the cheapest possible way and be of the greatest benefit.

PROFESSOR RADHAKRISHNAN (Calcutta): I am not a scientist and have not much knowledge of science; but it has been pointed out that research includes arts and other branches of knowledge. There has been a rather one-sided insistence on scientific research, and I feel it would be well to utter a warning.

Science is a great thing and we require scientific research. But science is not spiritual or ethical, it is colourless and impartial. It is as much interested in surgery which heals as in shells which destroy, which won the War. We have conferences to discuss a cure for cancer, and organizations for making poisonous gas. Scientific development, if it is not tempered by higher considerations, will lead to disaster. I therefore feel that all activities should be devoted to the present need, and we must work for the future emancipated by science and inspired by idealism. That is the first point.

The second point is this. In all this talk about co-operation in research throughout the Empire, research and the bonds of Empire were perhaps a little over-much interpreted in an economic or commercial way. You are trying to develop and conserve the resources of the Empire, not so much for the purpose of bringing about a closer inward unity, but with a view to finding out how the Empire can be made to serve particular interests. In India, at any rate, it is thought that graduates are the raw material to be transformed into finished goods, and the British graduates a part of the general export trade. I would ask that now, when the idea of the Empire has given place to the idea of a Commonwealth, and there are people in India, this country, and the Dominions who are interested in research, that we should introduce into this higher spirit of

research an impersonal outlook, and develop feeling for others as fellow-workers? University means fellowship. Why cannot we look upon all the workers in the Empire as co-operators in a common cause, helpers in promoting the universal good of humanity? If this University spirit is brought into operation and extended to imperial relations, I have no doubt that the British Empire will become a spiritual whole and in that way serve the interests of humanity.

I come back to the scientific side of research. It seems to me that in the matter of scientific research there is one problem that we all come up against, for which there are a thousand solutions and yet not one that is satisfactory—where to turn to find out what has been done in a particular branch of a subject we want to investigate. A Society has been started—the Association of Special Libraries, an Information Bureau—and in that Society we are endeavouring to co-ordinate sources of information, and I would like to beg that the Department of Industrial and Scientific Research should assist in that respect and try to weld all the efforts at indexing scientific work into one whole. As we heard from Sir Arthur Shipley, the Colonial Office has done invaluable work in entomology and mycology. In technological and scientific work there are so many different places to which you can turn for information that you do not know which to go to.

In the field of aeronautics to-day, we find that in Russia there was published before the War all that provides the basis for the latest theory of the aerofoll which has developed since the War. Had we had an exhaustive index of scientific publications it would have assisted us during the time when we particularly wanted that information to turn it up. It seems to me that, if we could once get workers in science to turn to one centre for their information, we should do much to promote co-operation.

There is another matter to which I should like to refer. The Chancellor, in opening the discussion in the Senate House, spoke of the enormous cost of the apparatus required in modern research. Could we not set up a clearing-house for apparatus made and designed for special research? It is saddening to see, and I think one sees it everywhere—it is not the fault of any one centre,—most beautiful apparatus standing on a shelf. It has done wonderful service in certain research work, and, if other workers knew of its existence and could obtain it, it might lead to the doing of research work which at present is left undone owing to the great cost of the necessary apparatus. Could there not be a simple system of telling the Department of

Scientific and Industrial Research that one has apparatus to lend or to sell? If one were prepared to lend it to other workers, it would lead to economy—and afford stimulation also, for other workers would find the apparatus ready-made. It might perhaps not be quite suited to their work, but it would enable them to do what otherwise would be left undone.

I therefore advocate these two things—an index of what has been done, and an index of what has been made.

WEDNESDAY, JULY 14—Afternoon Session.

SECTIONAL MEETINGS.

University Statistics.

Chairman : SIR THEODORE MORISON.

Interchange.

Chairman : SIR HENRY A. MIERS.

The Classification of Honours Graduates.

Chairman : SIR DONALD MACALISTER.

An Imperial Policy in Education.

Chairman : THE RIGHT HON. SIR FREDERICK LUGARD,
G.C.M.G., C.B., D.S.O., D.C.L., LL.D.

Paper by H. G. EARLE, M.A., Professor of
Physiology, Hong-Kong.

DELEGATES' MEETING.

UNIVERSITY STATISTICS.

THE discussion turned on the question whether the University Statistics of Great Britain published annually by the University Grants Committee constitute a suitable starting-point for a movement aiming at making statistics relating to Universities in different parts of the Empire comparable. The Universities Bureau began an exploration of this question last March by circulating among the Universities of the Overseas Dominions (other than India) the University Grants Committee's Tables of Statistics of Students in Great Britain, and inquiring to what extent they are appropriate for adoption by Universities in other parts of the Empire. A summary of replies was before the meeting.

MR A. E. WHEELER (Leeds) said that the compilation of these tables presents no difficulties so far as his own University is concerned.

SIR HENRY SHARP (Delhi) said that nearly all the information indicated could be obtained, so far as the Indian Universities are concerned, from the annual and quinquennial reports of the Bureau of Education of the Government of India. Nevertheless he thought it might be useful to consult the Bureau of Education and the Inter-Universities Board of India as to fitting Indian Universities into the framework of a scheme for establishing a set of University Statistical Tables for the Empire.

PROFESSOR PAYNE (Melbourne) said that the Secretary of the Standing Committee of Australian Universities might help.

MR W. G. R. MURRAY (Capo Town) drew attention to the returns of students and teaching staffs published by the Secretary for Education of the Union of South Africa.

PROFESSOR H. STANLEY JEVONS (Rangoon) drew attention to the ambiguity of the word "diploma" as used in some of the tables.

It was suggested that it would be useful to include in the statistics published in the *Universities Year-Book* particulars of the incomes of Universities showing proportions derived from the several main sources; also a comparative table of statistics for each Dominion.

INTERCHANGE.

THE CHAIRMAN referred to the report which the Secretary had contributed to the "Bulletin" of the Association of University Teachers, in which he had summed up the experience gained by the Bureau during the past fourteen years. This report, which was in their hands, made it unnecessary, he considered, to talk about methods or to discuss the relative prospects of their success. The subject had been selected for a sectional meeting because the Congress furnished an opportunity of obtaining advice and assistance from representatives of Universities overseas and an interchange of ideas. Members would recognize that they were about to consider imperial, not international, interchange. Nevertheless a good deal might be learned from the example set by the U.S.A., and especially from the scheme for arranging interchange of students and teachers with France and Belgium, and more recently with Germany, with the help of the Akademischer Austauschdienst.

One or two general principles might be accepted. As regards teachers, although exchange of person for person can seldom be arranged, the experience of Manchester has shown that there is no difficulty in arranging for an exchange of visits. A distinguished teacher may be able to leave his University for a term to lecture elsewhere, whether in a Dominion or foreign country or in some other University within the British Isles, as the guest of the Head of the Department responsible for his subject, and a member of this department may pay a return visit as his guest. The visiting Professor's teaching, especially if he be a specialist in a particular branch of his subject, is certain to prove a great stimulus to members of staff and senior students. Sir Henry Miers thought it most desirable, although far more difficult, to arrange for such an exchange of visits by junior members of the staff. As regards students, it is now universally recognized that, except in very special circumstances, migration is not desirable until after graduation. In Manchester it has been found that the provision of half-time teaching posts for graduates who desire to prepare for the Ph.D. facilitates migration. Finance is, of course, the difficulty. He would like to hear the views of representatives from overseas as to the ways in which this prime difficulty may be overcome.

PROFESSOR DAKIN (Liverpool), who for seven years filled the Chair of Biology in the University of Western Australia, expressed surprise that teachers of the Natural Sciences scarcely

seemed to recognize the great advantage of spending part of their lives in a Dominion.

PROFESSOR NOTCUTT (Stellenbosch) said that, apart from the advantages to be gained by students of the earth and of the things that live upon it, the younger members of teaching staffs have much to gain from other countries, from personal contact with people in other parts of the Empire, and generally from seeing things from a different angle. Temporary migration to a country south of the line presents obvious difficulties. For example, a teacher who after six years' service becomes entitled to six months' leave of absence may find that a great part of this time is occupied by the Long Vacation. He found that in his own case, as an exchange professor with Bedford College who was taking an extra six months to compensate for the Long Vacation difficulty, he needed to do more work than would allow him the leisure which he had looked for for his own researches.

PROFESSOR WEISS (Manchester) said that members of the A.U.T., of which he was recently President, recognized very fully the desirability of affording to junior teachers opportunities of travel.

MR BHABHA (Bombay and Mysore) considered the provision of opportunities for travel so important that Universities would be gainers if they paid the passages of younger members of the staff.

PROFESSOR DAKIN stated that although the Passenger Services to Australia and New Zealand had set a magnificent example of generosity, German steamship companies, generally, adopted a policy still more liberal. He had reason for knowing that before the War they were in the habit of carrying explorers and men of science free.

VICE-CHANCELLOR LOVEDAY (Bristol) pointed out that, although, as he knew from his own experience, an Arts man in the Dominions may have very grave reasons for wanting to consult the libraries and collections in Britain, an Englishman who goes out to a Dominion is relatively indifferent as to which it is. But he agreed with other speakers that residence out of the Home Land for a period is of the greatest value to a teacher. He intended to propose for discussion at an annual conference "The Immobilization of Universities." It had already been

stated that "Heads of Departments cannot move," but he thought that it could, and should, be arranged that they should have opportunities of moving. The gain to their Universities would often be greater than the loss.

MR RATHBONE (Liverpool) said that he would like Universities to grant to members of their staffs a sabbatical year on the lines of a Kahn Fellowship, *i.e.* on condition that the time be spent in travel.

PROFESSOR MOORE (Toronto) pointed out the very great opportunities which Canada offers to a student of his subject, Economic Geology, and of various other branches of natural and applied science.

THE CLASSIFICATION OF HONOURS GRADUATES.

THE CHAIRMAN, in explaining the purpose of the meeting, said that the question of the classification of Honours Graduates had been raised in the first instance by the University of Edinburgh. The chief task of the meeting was to discover whether the question had arisen in other Universities within or outside the United Kingdom.

PROFESSOR WHITTAKER (Edinburgh) said that the practice of the Scottish Universities was to divide Honours Graduates into three classes. Oxford favoured four classes. In neither case were these classes subdivided. In Cambridge three classes was the rule, but in some subjects the classes were subdivided and in others not; so that within this University the greatest divergence of practice prevailed. It was deemed desirable to introduce a uniform system, particularly in view of the fact that the grade of an Honours Degree in Arts was taken into consideration both by the Scottish Education Department and the English Board of Education in connexion with scales of salary for Secondary School teachers. Here again the two departments had different definitions of the term "Honours Degree." There was thus great difficulty in fixing the standing of an Honours Graduate with regard to such public appointments in England and Scotland, and considerable risk of unfair treatment. Edinburgh was by statute compelled to divide successful candidates for Honours into three classes: I, II, and III, the names in each class being in alphabetical order. Professor Whittaker thought this classification too broad, and advocated an increase in the number of classes. The new classification should be sufficiently minute to distinguish the very select class of students who should be encouraged to take up academic work, but not so minute as to emphasize the accidents of examination. Again, the necessity for Scottish graduates to obtain at least a Class II degree, in view of the requirements of the Education Department, had an unfavourable influence on the studies of the candidates, all other considerations being subordinated to the requirements of the examination. He considered the present classification too coarse and advocated the subdivision of Class II into two sections.

SIR PHILIP HARTOG (Dacca) took the opposite view. Instead of increasing the classes by subdivision he preferred the abolition of Class III, leaving only I and II. Fourth-class Honours

appeared a contradiction in terms. Subdivision tended to over-stress the candidate's performance at the examination. Moreover, the different standards of different examiners required a broad classification. Minute accuracy of subdivision was unobtainable in examinations, except perhaps in mathematics. In all border-line cases the speaker thought that the candidate's record of study should be taken into account in forming a decision.

PROFESSOR H. J. C. GRIERSON (Edinburgh) agreed with the abolition of Class III, while admitting the feasibility of a subdivision of Class II.

PROFESSOR P. J. HEAWOOD (Durham) preferred the retention of three classes, as sufficient.

PROFESSOR A. P. NEWTON (London) thought that too many students were encouraged to take Honours in such subjects as History. He would prefer a better Pass Degree for the weaker Honours candidates, and condemned any attempt to obtain numerical accuracy in marking. A broad classification of the α , β type was the best method to employ. The publication of names in order of merit was undesirable. In his experience many Class II graduates had done remarkably good historical work in later life, their relatively moderate performance at the examination being only a sign of late development. The attempted correlation of Honour Degrees and Departmental scales of salary he regarded as disastrous. All that the examiner could do was to arrange candidates according to their apparent suitability for particular types of work in after-life.

SIR DONALD MACALISTER (Glasgow), speaking as a delegate, informed the meeting that the Edinburgh proposal to extend the classification by the subdivision of Class II had been submitted to the other Scottish Universities and rejected by them. They felt that the question had been unfortunately complicated by the relation of grades of degrees to official scales of salary in the public services. It was desirable to regard questions of classification as a purely academic matter, not influenced by the non-academic demands of Government departments. He had not sufficient confidence in the precision of examinations to accept a more minute classification of Honours graduates than that of the three grades. He would rather prefer a reduction of the Honours classes to two. This had been done at

Glasgow in certain Science departments. The old Class III type might then receive a Pass Degree as a mark of meritorious, though not completely successful, performance in an Honours course, which might be different from the normal Pass course.

PROFESSOR A. C. DIXON (Belfast) saw difficulties in the way of giving credit in border-line cases for work done during the course. He could not always be sure that a student's work throughout the course indicated his own individual effort. Some students were inclined to work in groups, others received exceptional assistance at home.

PROFESSOR H. J. W. HETHERINGTON (Glasgow) agreed with the Chairman that the proposal, emanating from Edinburgh, to subdivide Class II was not acceptable to the other Scottish Universities. Taking up Professor Newton's plea for the second-class man who showed late development, he thought that the initial handicap imposed on such men on entering on their profession would not operate for long; good men who were really close to the First Class would soon overcome it. He would prefer to see Class III abolished, but would acquiesce in its retention. On the whole, too much importance was attached to distinction in examinations. "University Honours," it had been said, "once attained, were best forgotten."

PROFESSOR H. R. HASSÉ (Bristol) thought two classes in Honours were sufficient, with a Pass Degree for those who deserved some credit without reaching Honours standard.

PROFESSOR C. CORCORAN (National of Ireland) thought Universities should issue fairly detailed numerical statements and analyses of examination results, at periods of five or ten years, showing the aggregate percentages of Honours and Passes obtained in the several classes, and also of failures. These, properly interpreted, would throw considerable light on relative standards.

MR H. J. BUTCHART (Aberdeen) drew a distinction between examinations for professional degrees and for degrees in Arts subjects. The former called for fewer grades than the latter.

"AN IMPERIAL POLICY IN EDUCATION," WITH
SPECIAL REFERENCE TO THE UNIVERSITY OF
HONG-KONG.

Paper.

THE Colony of Hong-Kong is the commercial gateway through which trade passes between China and the West.

Its cession to Great Britain in the early forties of the last century marked the end of a series of ventures which had as their purpose the opening of China to Western trade.

Japan, seeing what happened to China, decided after 200 years' seclusion from the West, not only to open her doors to the West, but also to assimilate as far as possible the knowledge which had led to Western progress. So successfully has this policy been carried out that to-day Japan ranks as one of the "big four," and in the realm of education has already built her Universities and sent forth her graduates to compete successfully with those of Western nations.

China, on the contrary, was reluctant to abandon her oriental isolation and traditional methods of education, so that it was not until the beginning of the present century, following the Boxer Rising, that the Chinese nation paid any serious attention to Western culture.

In a paper entitled "The Chinese Renaissance," Dr Hu Shih of the National University, Peking, writes:

"The wounds of 1900 had hardly ceased to smart when the Russo-Japanese War broke out in 1904. In the complete victory of Japan over Russia was writ large the lesson that, by thorough modernization, a small oriental nation could resist and even defeat the aggressive forces of a great empire of Europe—the absolute efficacy of modernization was proved beyond any doubt, and thousands of Chinese students flocked to the schools of Japan to seek the light that was hoped to work similar miracles in China."

But he goes on to relate how this led to a movement of "modernization which extended only to externals and non-essentials and brought the nation no nearer its salvation."

"Three things, however, conspired to make possible a new period of Chinese Renaissance. The first was the Chinese

Revolution of 1911, the second was the return of the American portion of the Boxer Indemnity and its exclusive use for educating Chinese students in the United States, and the third was the Great War, 1914-1918. The success of the revolution gave the Chinese people a sense of self-confidence, while its failures in the political aspects forced a number of leaders to turn attention to social and intellectual problems. The return of the American indemnity made it possible to bring a large number of young Chinese into direct contact with the scientific, social, and historical background of modern civilization. The Great War furnished China with a period of breathing space during which native industries were gradually developed, relative prosperity was restored in spite of political disturbances, and many social and intellectual problems hitherto untouched were one by one brought to the front."

In the period following the Boxer Rising the British were also giving some attention to the educational problems of China, so that in 1909 there were no less than three schemes receiving serious consideration.

1. A scheme known as the Emergency Committee Scheme, for raising £100,000 for the support of existing centres of medical and literary education.

2. Lord William Cecil's scheme for establishing a University in China, the proposal emanating from a group of Oxford and Cambridge educationalists.

3. The Hong-Kong University Scheme, presided over by Sir Frederick Lugard, then Governor of the Colony.

Sir Robert Hart, writing to Sir Frederick Lugard in 1909, said:

"Your scheme is excellent and deserves the fullest support, and it promises much that will do real good. There is, however, room for the other proposals, and the question is, How to finance all three? . . . My own sympathies are with all three, for I think each, if carried out, will certainly be useful in its time and place; but I regard the Hong-Kong scheme as the most practically promising, and applied science will suit the Chinese requirements: at the same time character is one of the utmost importance, and I am glad to see that all three schemes give that idea such prominence."

It was, however, a pity that at this juncture no effort was made to co-ordinate these schemes in a common policy leading to an

educational entente between the British and the Chinese nations. Each stood for a principle which it was desirable that all should follow: the first in its support of existing centres, the second in its origin from the Universities of Great Britain, and the third in its alliance with the government of a British colony. If a Home Universities' Committee could have founded a university in Hong-Kong with the support of the local community and in co-operation with the "new" educational movement then taking place in China, a larger contribution would have been made than has been possible under existing conditions. Still, the opening of the Hong-Kong University was the beginning of an imperial policy in education, since it was designed to show that the British care for culture as well as for trade, and that they recognize the value of education in cementing the friendship of nations.

But though local in origin, the founders recognized the importance of linking up the Hong-Kong scheme with University education in Great Britain, and with this end in view Sir Frederick Lugard wrote to the Vice-Chancellor of the University of London (which at that time had within it the possibilities of an Imperial University) and received the following reply:—

"That the Principal be requested to inform Sir Frederick Lugard that the Senate are anxious to assist him in the promotion of his scheme so far as may be found practicable, and specifically that they will be prepared to conduct final examinations for degrees to be conferred by the Hong-Kong University, provided that satisfactory arrangements can be made; and that meanwhile they have referred the matter to a Committee for consideration and report on the practicability of the scheme and the details of the necessary procedure."

The practical outcome of this has been that the award of honours for the B.Sc. degree in Engineering is now made on the advice of London University examiners, acting as assessors.

Of 108 engineering students, 11 have obtained first-class and 22 second-class honours under this arrangement.

In the Medical Faculty the degrees are recognized by the General Medical Council for registration in Great Britain, and this carries with it certain privileges in respect of admission to the examinations of the Royal Colleges of Physicians and Surgeons. The University has also been granted such privileges of affiliation as are offered to colonial Universities by the Universities of Oxford and Cambridge, and the University matriculation

examination receives such recognition as is granted by the home Universities to the Universities overseas.

The foundation-stone of the University was laid in March 1910, and the main building opened in March 1912.

The following quotation from a speech made at the opening ceremony will indicate what was in the mind of the first Chancellor :—

“ I am profoundly convinced that the opening of this University in Hong-Kong to-day is an event of the greatest historical interest and importance in the annals of the Far East. If this University develops on right lines, as there is every reason to believe that it will, on the lines which its founders laid down, I doubt if there is a man or woman of those here to-day who realizes to its full extent the enormous importance of the task to which we are putting our hands or the far-reaching effect it may and will have on the future of China and on the relations between the East and the West—particularly between Great Britain and the Chinese nation.”

So much for the vision, what of the practical results ?

Although the University of Hong-Kong is still a long way from achieving the position thus outlined, I think it must be admitted that since its foundation a steady progress has been maintained and that it has contributed not a little to the general position and prestige of the Colony. There has been a steady increase in income, in students, in staff, and in buildings. Owing to the generosity of local Chinese, the Medical School now has well-equipped schools in anatomy, physiology, pathology, and tropical medicine; and thanks to the Rockefeller Foundation of America, the hospital facilities now include three clinical units each with its staff team under the directorship of a full-time professor in surgery, in medicine, obstetrics and gynaecology. The Engineering Faculty is well equipped with machinery, and has recently built new engineering workshops; while the Arts Faculty has a promising Department of Education for the training of teachers, and is now organizing a purely Chinese Department, where it will be possible to study the history and literature of the great oriental nation which the University desires to serve. On the social side there is a flourishing Students' Union, with which are associated the various athletic clubs and where the best traditions of British sport are fully maintained.

That this expansion has been possible during the difficult years

that have elapsed since the foundation of the University is largely due to the support of the local government; and as far as the Medical School is concerned, to the support of the Chinese residents, who gave the schools for the pre-clinical subjects; and to the Rockefeller Foundation, who made possible the beginnings of a modern University hospital.

At the end of the Great War it became clear that the financial resources of the University were not sufficient to meet the growing needs of the University, so that the local government considered it desirable to appoint a Commission to investigate and report on the whole position.

The full report of the Commission was never published, but a statement in the Government *Gazette* reads as follows:—

“The Commission, among its recommendations, strongly advises that the University should be carried on under conditions which make for efficiency and success: that if it is to reach and keep a position worthy of the Colony and the British Empire, and if it is to take its proper part in the developments now in progress in China, it must maintain a standard fully as high as, or higher than, in the past, and must expand soon and widely. The Commission recommends that the Government should assume financial responsibility to an extent sufficient to carry on the work of the University efficiently, and proposes that the Government should contribute not less than one million dollars to the endowment fund as well as largely increasing its present yearly grant.”

The Government agreed to this, “with the intention that the University shall not only be freed from all present debts and have its past endowment restored intact, but shall also be assured of an adequate income for the future.

“It is the hope and expectation of the Government in thus guaranteeing the maintenance of the University, that it will encourage contributions from other sources, especially for further expansions now unprovided for, such as the endowment of special professorships.”

It was at this juncture that it was decided to approach the Rockefeller Foundation of America (which had already shown an interest in the University Medical School and had done a great deal for medical education in China) in regard to the endowment of professorships in clinical subjects.

The appeal was successful, and in 1922 the Foundation agreed to give to the University a sum of \$750,000 for this purpose.

The announcement of this benefaction coincided with the visit of H.R.H. the Prince of Wales, who graciously accepted an honorary degree and then as the University's most recent graduate endorsed an appeal for funds, which were necessary if the University was to benefit fully by the Rockefeller benefaction, and if the other Faculties were to share in the development outlined for the Medical School.

While the action of the Government and of the Rockefeller Foundation in thus assuring the maintenance and development of the University and its Medical School has given the Colony an institution of which it may well be proud, the recent situation in China has made it difficult for the University to secure that sympathy and support from China which is so essential if the University is to achieve the wider objects for which it was founded.

It is not within the scope of this paper to recapitulate the events which have been recently taking place in China, or to dwell on their significance, but a strong nationalist movement emanating almost entirely from the Chinese Universities makes it difficult at the present juncture for the University of Hong-Kong to obtain the support of Chinese educationalists; while the strong anti-foreign movement in South China and the boycott of Hong-Kong, which has seriously crippled the resources of a prosperous colony, makes it impossible to secure any further financial support at present either from the citizens of the Colony or from the local government.

And yet the expansion of the University appears to offer a solution of the very difficulties from which British prestige in China is now suffering. It is probable that if the situation is properly handled, the University could do more than anything else to reconcile the Chinese to a British colony at their doors and make both nations realize the advantages to be derived therefrom. In this connexion the following paragraphs, taken from a pamphlet recently issued by the Vice-Chancellor, point the way:—

“Educated Chinese who have given long and patient study to the rich inheritance of their own civilization are resentful both of comparative neglect by scholars of the West and of the quiet assumption that in all such matters the Western world must necessarily be superior. They point to the fact that while China is learning rapidly from the West, sending her students to Western universities and studying Western subjects in her own schools, yet the West considers that a

man has received a liberal education who knows nothing about the history of art, literature, and thought of the Orient.

"The University of Hong-Kong started with the idea that China's greatest need was scientific and technical training—the University was to become a force in the Far East by producing qualified engineers and skilled doctors. The training of engineers and doctors is still necessary, but the University, if it is to justify its existence as the only British University in the Far East, must do far more than impart technical and professional competence. Its teachers must study critically the signs of the times, and there must be among them those who are capable of interpreting the West to China and China to the West. Sir Frederick Lugard, the founder of the University, did not hesitate to proclaim that upon the Colony of Hong-Kong devolved the duty of upholding the name and fame of the British in the Far East. The difficulties of raising this declaration from the region of mere aspiration into the realm of reality are enormous, but the issue at stake is equally great. The Chinese have a traditional respect for learning, and the presence in the University of Hong-Kong of British teachers engaged in the task of training young men to think out honestly the vital problems—political, social, financial, and domestic—with which China is now beset would be a moral asset of incalculable imperial value.

"The Hong-Kong University problem is not a problem of what should be done for the higher education of the citizens of the Colony. The Hong-Kong University is at the moment an acute imperial problem."

And more recently in a letter he writes:

"No one is more alive than I am to the difficulties of the Hong-Kong University. I do not, I hope, underestimate the forces of Chinese nationalism or the potency of Chinese sentiment. Twenty years' experience in India has taught me that to conduct colleges and schools which run counter to the feelings of the vocal section of a country's people, however small numerically that section may be, is hopeless. But it is, I think, a mistake to ignore the advantages of a British colony as a seat for a University for Chinese. We have had no trouble whatever with the students. Actually, I have not had since the boycott and strike began a single disciplinary interview with a student in connexion with

anything even remotely concerned with politics. Their loyalty and good sense has been amazing. Remember that we still have in the University sixty students whose homes are in Kwang-tung, and that many of these students came back to Hong-Kong at the close of the last summer vacation at the risk of their lives. Surely it should count for something that the three hundred students of this University should have been able to go quietly on with their work during a year such as we have just passed through. Then, again, we must not forget the overseas Chinese. These people are going to play a big part in the future of South China. They want to keep in touch with their national tradition; surely, if we can help them to do so, we are doing something which is worthy of consideration."

The fact that the University of Hong-Kong is able to command the loyalty of its Chinese students at a time when the Chinese of Canton are trying their best to destroy the Colony, may very materially help in the maintenance of British prestige and justify more than anything else the existence of the University.

But in carrying out such an imperial policy the University of Hong-Kong must have the support of the Universities of the Empire. The Universities Bureau stands for such a policy, though its present organization does not admit of much being done. It must be recognised that the Universities have a part to play as well as the men of commerce, the missionaries, and the State in creating the right type of relations between the nations of the East and West. That is, I take it, what is meant by the title "an imperial policy in education." Not a commercial policy, not a missionary policy, not an imperialistic policy, but an educational policy framed and executed by the Universities themselves and organized through some such central body as the Universities Bureau.

The University of Hong-Kong has already derived considerable prestige in China from the relations which it has been possible to establish with the home Universities. The recognition of its medical degrees by the General Medical Council and by the Royal Colleges; the award of honours to its engineering graduates by the University of London; the privileges of affiliation granted by the Universities of Oxford and Cambridge, and the recognition given to its matriculation examination—all these have proved of inestimable value in commending the University of Hong-Kong to the Chinese as the representative of British Universities in the Far East. And the creation of the Universities Bureau and the

organization of such congresses as that in which we are now taking part afford evidence of the desire of the home Universities to co-ordinate in some way the work of British Universities throughout the Empire.

In other words, an imperial policy in education already exists, although it is very desirable that it should be extended. For if the University of Hong-Kong is to be really successful, it cannot be left entirely to the local community, it must be regarded as an outpost of British University activity, and as such must be supported by a strong home base.

The present Universities Bureau is a bureau of information, and its committee is chosen to represent the interests of the different Universities which it serves. But if a real policy is to be developed it is necessary that a committee should be formed, with a constitution designed to secure interest in the assistance of educational effort throughout the Empire. Such a committee would not represent any particular University, but would be composed of men who were interested in the spread of culture throughout the world, and who saw in such a policy a means of preserving international peace.

The decision of the British Government to remit the Chinese Indemnity for purposes mutually beneficial to the two nations, and the despatch of the Willingdon Mission to China to confer with the leaders of Chinese thought, shows that the Imperial Government recognizes the value of such a policy; while the formation of a Universities China Committee in connection with the Universities Bureau shows that British educationalists believe that Universities have a part to play in establishing friendly relations between the nations. Sir Arthur Shipley, as chairman of the Committee, writes :

“There can be no question in this country as to the hereditary friendly attitude towards China. The time has now arrived when an organized effort should be made to place this friendship upon a surer foundation. The foundation of greater mutual knowledge and esteem. It is believed that this could best be effected by a movement to improve the cultural relations between the two countries, and the first step towards initiating such a movement should be to invite two or three eminent and representative Chinese to visit Great Britain and lecture at Universities and other institutions.

“If this programme were successfully carried through, we may expect that the Chinese would respond by inviting

a like number of Britishers eminent in various branches of learning to lecture at appropriate centres in China. This might well result in arrangements for such exchanges of visits being placed upon a permanent basis, and we may expect that any such attempt to improve the relations between Great Britain and China would be favourably viewed by our Government."

While as secretary of the Universities Bureau, Dr Alex Hill writes :

"An important Mission has recently left for China to consult with the intellectual leaders of the nation regarding the return of the Boxer Indemnity. If action initiated by our British Universities can be made to synchronize with this attempt to draw the two countries closer together, results of great and permanent value may well be achieved."

This action on the part of the Imperial Government and of the Universities Bureau is very encouraging, for it affords very definite evidence that new methods are possible in dealing with the difficulties that arise between nations, and that an interchange of culture between two countries is the best means of cementing a friendship which already exists, but which for the moment is obscured.

The development and extension of such a policy by the Universities must of necessity be a slow process, and it is difficult at the outset to say in detail how it is to be effected. It is undesirable that all University work should be standardized, and it is important that local effort and control should be given free play. But once such an advisory committee had been established, it would be able to assess the value of such schemes as were placed before it, and its approval of any scheme would certainly carry weight locally and encourage the local community to give it all the support possible.

The approval of any place as a suitable centre for a British University by such a committee would encourage the recruitment of staff and would give men who made the venture a standing which once recognized would enable an interchange of service between one University and another. In the approval of such centres two things above all others would come up for consideration. First, the demand by the community for the training of University graduates; and second, the question of a field for research.

In the case of Hong-Kong, for example, there is not in the

Colony itself a sufficient demand for the graduates which the University is able to supply ; but there is a large field among the overseas Chinese which are found throughout the British Empire, and especially in the Straits Settlements and among the Malays and other oriental subjects in British Malaya.

From time to time schemes are put forward for the foundation of other British Universities in the Far East, but though competition among the different British communities is good, it would be far better if the value of such schemes were assessed by an impartial committee with a general imperial outlook.

It is not fair to start a large number of local schemes and then expect the home Universities to support them by sending them men, when the home Universities have not had the chance of considering the value of such schemes.

The case of research is all-important. The recognition that research constitutes an essential part of the work of a University is rather apt to be overlooked by a local community anxious to have a University. The function of a University professor is conceived to be that of teaching, and the question of time and facilities for research does not receive sufficient consideration. An imperial committee would make it quite clear at the outset to Local Authorities that they could not expect to get the best men unless the research aspect of a University work was fully recognized, and no centre would be recognized unless it offered a field for research. In the case of Hong-Kong there are wonderful opportunities for research in Medicine and the allied sciences, especially anthropology ; while on the Arts side, apart from more technical subjects such as Economics, there are the opportunities for the study of the art and literature of an ancient civilization.

With regard to Engineering, Sir Maurice FitzMaurice said, when he visited Hong-Kong in 1922, that never had he visited a place where there were within so short a distance of each other so many different examples of the work of the engineer. He mentioned three large and up-to-date dockyards, where ocean-going ships are built and the largest ships in the Pacific repaired ; four big electrical power-stations ; splendid motor roads built in the face of almost insuperable difficulties ; the water-supply system with its various reservoirs and the great dam at Tytam, the biggest thing of its kind east of India ; the many modern factories ; the steam railway on the mainland with its locomotive works, the unique cable train, the electric tramways ; the seaplanes, the wireless masts, the great variety of shipping in one of the finest harbours in the world ; the reinforced concrete

buildings, the ice factory, and the system of drainage and public health work. "All these things and many others ought to be object-lessons and inspirations for the young engineer in training in Hong-Kong."

Now the benefits to be derived from research in any of these fields should be of value throughout the world, but at present the University staff is too small and its time is almost entirely absorbed in teaching and administration. The question of co-operation in research throughout the Empire and the question of the interchange of staff are subjects that are receiving consideration at other sessions of the Congress, but their consideration by a permanent committee would form the most important contribution that could be made towards a University policy in education.

Having once approved a scheme for the foundation of a University overseas, the next thing which comes up for consideration is its support by the home Universities. The question of finance must of necessity be largely a local one, but academic support by a home base is equally essential. One of the greatest difficulties in the creation of a University in a new centre separated from other Universities is the question of the University library. The importance and expense of a good library is, I am afraid, not sufficiently recognized by Local Authorities. But before a University is established the question of library facilities must be seriously considered. The Rockefeller Foundation of America, to which reference has already been made, are now considering how they can best assist in this most important problem, and have already assisted the Medical School by publishing an appeal for reprints to be sent to Hong-Kong. I think this is a way in which the home Universities could also render assistance.

If it were felt by workers in isolated centres that there was a central body to whom they could appeal in this matter of obtaining the literature necessary for their work, it would tend to remove the sense of isolation and encourage research.

Hitherto the problems raised chiefly concern the University staff.

What of the students and graduates?

In the first instance, it is essential that a University centre should be fed by a number of good schools capable of educating their students up to the standards required for admission to the University. And there must be a system of scholarships to encourage school students to make the venture and establish the necessary link between the two systems of education.

Further, with regard to the graduates, there should be established a system of fellowships whereby the best of them may be sent to the home Universities for further training, and for that wider culture which only the home Universities, owing to their age and experience, can offer. Dr P. W. Kuo of the National University of Nanking, writing on higher education in China, says :

“ A significant movement in Chinese higher education has been the sending of students to foreign countries to drink direct at the fountain-heads of Western learning and inspiration. . . . To them as a class must be credited the introduction of Western ideas and methods, the institution of fundamental reforms, and the gradual transformation of the social and economic order of the country along modern lines. Both as students of Western civilization and as interpreters of Chinese learning and culture to the West, they have a share to contribute toward bringing the nations to a closer friendship based upon intelligent mutual understanding.”

This again introduces subjects already under discussion at other sessions, such as the mutual recognition of examinations and of periods of study in different Universities, and to the general question of affiliation. If there is to be a real interchange of culture between different countries, it is essential that some effort should be made to link up the different educational systems.

The University of Hong-Kong appears to offer unique opportunities for the solution of this problem as far as it concerns the Universities of China and Great Britain. For it is in touch with both systems and can interpret the one to the other.

Such are some of the problems which would come before the proposed committee. There are no doubt many others, but I hope that sufficient has been written to give a practical meaning to a subject which by title appears somewhat vague and idealistic.

It may be justly said that too much space has been given in this paper to the position of the University of Hong-Kong, but since it is one of the chief purposes of these Congresses to bring visitors from overseas to the home base, so that they may see what is going on, so also it is important that the home Universities should be informed of the conditions and progress of the Universities overseas.

The general purpose of the Universities Bureau of the British Empire is to bring the Universities together, and out of that there

must ultimately emerge a common view of the aims and objects of British University education.

We must see to it that when we disperse we still remain in close touch with each other's activities, and render each other that mutual help which will make the Universities an effective force in binding the Empire together and in improving international relations.

H. G. EARLE.

THE CHAIRMAN: Our time is very short, and my comments on the admirable address which we have just heard shall be brief, in order that others may join in the discussion. The paper is one which naturally interests me greatly, since it was largely concerned with the University of Hong-Kong which was founded at the time I was Governor of the Colony, and which I am privileged to represent on the Bureau of the Universities of the Empire in Congress here.

Professor Earle seemed, I thought, a little at a loss to connect his theme with the title which has been assigned to it in the programme. Possibly I may be able to make the connexion more clear. We have heard much of late of a "new educational policy" in regard to Eastern and African races. A Memorandum emphasizing its salient points was issued as an official paper by the Standing Committee on African Education at the Colonial Office, and endorsed by His Majesty's Government. One point on which that Memo laid emphasis was that Education must be based on all that is best in the traditions and culture of the race, and imparted to a large extent in their own language.

The African side of the subject received international sanction a fortnight ago, when delegates representing twenty-six scientific and missionary societies from ten countries of Europe and America met in conference in London and created "The International Institute of African Languages and Cultures."

The Hong-Kong University, on the other hand, was dealing with an ancient civilization in which the acquisition of learning is regarded as having the foremost claim to social and civic recognition. The declared aims of its founders were, however, in all respects identical with the fundamental principles of the "new Imperial Educational policy," and it may claim to be one of the first Imperial institutions to frame its policy [which I described in a short paper at the first University Congress of 1912] on those principles and to apply them to University education.

Public interest at that time, about 1910, had been arrested by the description given by Sir V. Chirol in *The Times*, and later in his book *Indian Unrest*, of the results which had followed the educational methods adopted in India. He described the non-residential Universities, whose penniless students were compelled to live in very undesirable quarters in the cities, and crammed themselves to pass a set of examinations in order to obtain the coveted degree of B.A. Though they produced some brilliant men like Sir Jagadis Chandra Bose, there were, as he told us this morning, no laboratories and no equipment, and

for the vast majority there was no opening and no career, and they became an easy prey to the agitator. A literary education, to the neglect of all forms of vocational teaching, was the only one which attracted the students, and owing to the non-residential system there was an entire neglect of the training of character and of discipline of life, while religious teaching was excluded from all Government institutions. All this in spite of various education committees which had recognized and deplored these defects, and in spite of Government of India Resolutions based on these reports, but inoperative in practice.

In China, somewhat different causes produced almost equally disastrous results. Young men, as Professor Earle has told us, flocked in thousands to the Universities of Europe and America at an age when their characters were unformed. They returned to create the chaos we have seen.

The Hong-Kong University aimed at a new policy. It was residential. It encouraged hostels where moral and religious teaching could be given without any distinction of creed. It promoted rivalry in sports and athletics. It taught Engineering and Medicine, and aspired to establish an Arts Faculty where Chinese might study their own language and literature and qualify as leaders among their own people. It was not averse to study in Western Universities, provided that the student had already graduated, or spent some years of study in his own environment, and went abroad with character formed and principles to guide him. We have heard the Vice-Chancellor's testimony as to the results. Amid all the anti-foreign agitation led by the students of Chinese (so called) Universities, their loyalty was, he says, "amazing," and many returned from their homes at the risk of their lives.

That is the new educational policy for which the Hong-Kong University stands.

Dr Earle appeals for closer support by the great Universities of England; for scholarships and fellowships to cement the tie; for a permanent University Committee for Research, whose work need not be limited to Hong-Kong; and for help in the formation of a library.

The Hong-Kong University, situated on the threshold of China, but outside the turmoil of warring armies and political intrigue, offers a unique opportunity for British efforts for the good of China and the inauguration of a truly Imperial Education Policy.

Discussion.

SIR MATTHEW NATHAN: I am kindly invited to say a few words. I had come here without any intention of doing so, and do not feel I can add usefully to the valuable paper which has been read by Professor Earle, or to Sir Frederick Lugard's remarks on it. I happen to have been in Hong-Kong the other day when the boycott was thoroughly in force, and it was remarkable to find that of the many educational establishments in China which had been affected by the anti-foreign spirit the University of Hong-Kong was not one. I attribute it to those special features to which Sir Frederick Lugard referred—to the fact that it is a residential University, and to the influence brought to bear on the students in the hostels. But, of course, one cannot close one's eyes to the fact that the number of students at the Hong-Kong University is only about 300; the people in China are more than 300 millions, so that the influence cannot be very widely extended in existing circumstances. If anything can be done by the Universities here to give assistance to the University at Hong-Kong which would increase the range of its power, it will certainly serve the interests of peace and quiet in China.

DR MACMILLAN BROWN (New Zealand): I wish to say a word or two on the relation of the British Empire and its educational interests to the races of primitive culture which it comes into contact with in every part. I am myself from New Zealand, which has several of the South Sea islands under its wing. No provision is made to fit those who come out to govern these islands to understand the culture existing there, or the languages spoken. It seems to me that it is extremely foolish to attempt to govern people of a primitive culture without knowing their culture. The officers of the British Empire will make mistakes perpetually if Anthropological Chairs are not established in every University in the Empire. I rose, therefore, to lay my finger on a weak spot in nearly all our Universities. We have hundreds of primitive races to deal with. In Africa there are hundreds of languages and hundreds of types of culture. In the Malay Peninsula British officials come into contact with many types of Eastern culture. In Singapore are to be seen all the races of the East and of the Malay Archipelago.

So also in New Guinea we have scores of languages and types of culture in the two sections of the island which Great Britain has to deal with through Australia. I do not think that our

Universities have quite understood the absolute necessity of training our governors and judges in the cultures they have to deal with. I know that many in New Zealand are appointed to judgeships in native courts without studying the Maori culture or language. That is a grievous mistake and will lead to trouble in the future. I know that, however it is caused, it is pretty much the rule all through the British Empire to ignore the cultures of primitive races in appointing judges and governors.

The Germans did differently. I happened to be in Samoa when the Germans were governing that territory; I went through the Caroline Islands when they were there, and found that all the governors and judges studied the native culture and languages. We ought to follow suit. We shall come into grievous peril if we do not urge this on our Universities, especially those like Hong-Kong, which is surrounded by primitive races. In the mountains of Fokien there is a race, the Yaccas, who never let the women wear shoes which contracted their feet, and only with great difficulty were they got to wear the pigtail under the Manchus. All these have to be dealt with by a University like Hong-Kong, and to send anyone out to judge their cases without knowing what their primitive ideas are is to arouse rebellion.

We have omitted to instruct our judges and civil servants in the primitive culture of the tribes they have to deal with. I wish the British Empire would follow the example of Germany, and I think it is the first duty of a University in any part of the British Empire which comes into contact with primitive peoples to teach the anthropology of those peoples.

MAJOR GARRETT (Panjab): My remarks will be brief, but I get up because I think, with the exception of Sir Frederick Lugard, I am the only person in the room who was in Hong-Kong when the University was built, and I was glad to hear the story of ordered progress. But there is one thing arising out of the paper which was read and the remarks made by Sir Matthew Nathan, and that is the question of residential versus non-residential institutions.

Professor Earle has told us how in a time of great civil disturbance the Hong-Kong University remained firm and unshaken. I represent a University in the North of India, and it fell to my lot to be Principal of the most important college in that University when the great storm of non-co-operation swept over the colleges of India in 1921. I am glad to say that at that time my own college, which contains a majority of in-living students, was,

like the University of Hong-Kong, practically unaffected by a disturbance which threatened to wreck the whole life of the University. I only lost 11 out of 650 students. I want to emphasize the point because it seems to me that in certain of our overseas Universities, as Sir Jagadis Chandra Bose told us this morning, the non-residential student has to undergo so much, sometimes living in a hovel, that it is essential to success in dealing with the non-European student that he shall be residential and shall be brought as far as possible into almost constant contact with the European influence and made to recognize and understand European angles of vision.

SIR GEOFFREY BUTLER (Cambridge): I feel a little hesitation in bringing back the discussion to the subject put before you by the last speaker but one, particularly because I am not certain that the last speaker has not suggested an equally important theme, and one which, I think, everybody here must have been impressed with. But that subject of the relation of the University—and particularly the schools of Anthropology in the Universities—to the government of subject races is one which I think this section of the conference does well to think about and study. I believe that to a very large extent, from such small experience as I have, it is almost incontestable that we are not doing as much perhaps in the way of pressing the importance of Anthropological Chairs as is incumbent on us at the present time. But I am not sure that you are getting at the bottom of the matter by founding Anthropological Chairs. The difficulty is to get some of the Governments to recognize that the occupants of Anthropological Chairs have any importance at all. After discussion with New Zealand and Australian educators, and with Australian and New Zealand politicians in particular, one is aware that in New Zealand and Australian Universities and schools at the present time there is a very definite effort being made to try to persuade the Governments concerned to have what we should call a first-class Civil Service recruited largely from the Universities and schools, and that it is being blocked, at every stage, by the politicians.

We were informed the other day in the Senate House that in the Dominions there is no such thing as Government pressure exercised on the various Universities. Of course there is no highwayman pressure, no dramatic pressure, but there is something much more serious, the pressure of democratic ignorance upon the Universities, which checks them fulfilling their proper service to the State. That is a point which was raised by a

professor in Melbourne University, which is well worth our trying to take up at the present time. We should insist upon the importance in these new mandated territories of the State getting properly trained officials.

I speak as a mere politician who has only been able to read about these things from outside, and I put my remarks in the most challenging language I can. It is the most menacing influence in these countries at the present time. I say that to challenge any opposition or comment. If out of this Congress there could arise discussions at League of Nations Union meetings, or in the papers, or in any other way, in which that point could be brought up and public attention focussed on it, this Congress will not have met in vain. I do believe that that is the kind of influence of the State which is most baneful—the catchwords of a cheap, democratic, politician philosophy, which ranks the distinction of experts as a class distinction and which is inimical to the true ideals of University education.

PROFESSOR FOGARTY (Malta): I am not quite sure that the Member for the University of Cambridge quite got the point of the preceding speaker. What he wanted us to do was, as far as possible, in our schools in England and in our Universities, to see that the men sent out to rule in the Colonies and the Dependencies should be men who are ready to realize that there are ancient civilizations, men who will enter into the lives of the people with whom they deal and not hurt their feelings in any way. I am afraid that at times people go forth without that feeling, and that injuries are done in certain parts of the Empire that can never be repaired. If our Universities in England can—in so far as they train men for the Indian Civil Service or send professors to Universities in other parts of the Empire, or civil servants to the more primitive parts—train them to take an interest in other forms of culture, they would instinctively study their history and would find means of showing their sympathy with the people whom they have to govern. I am afraid that some of us, when abroad, keep very much aloof from the people of the country we are in. I, for example, am in a University where I lecture to people, not primitive in the sense of ignorant, but primitive in the sense that their civilization goes back very far. It is necessary to get to understand their culture, and to discover what they and we have in common.

PROFESSOR CALDWELL (McGill): I came into this session with a particular interest, and would like to mention the fact that I

happened to be three years ago in Holland, and at Leyden I was asked by the professors in the University to see one of the most characteristic institutions in Europe—the Sendeling School. I learned of the vast colonial empire of Holland in Java, Sumatra, etc., which they tried to collect when it became a Dutch Republic. In this school they do the sort of thing which has been described. Instruction is given in Anthropology, Agriculture, Psychology, and Science. Holland is doing the kind of thing which the British Empire ought to do on a very extended and thorough-going scale.

I commend that school to the inspection of everybody in this room.

THE CHAIRMAN: I will offer only a brief comment on the points which have been raised by the various speakers.

With regard to the remarks made by the gentleman who spoke of New Zealand, I think that he is hardly fair to our administration in tropical colonies in inferring, as I think he did, that the Germans were more thorough in the study of native languages. My personal experience is the reverse. In the British colonies every educational and administrative officer has to pass in the local language as a qualification for promotion—a rule which I think has no parallel in any of the colonies of other European Powers.

As to a more extended study of Anthropology and kindred sciences, I told you just now of the institution of an international bureau for the study of African languages and culture. The centre is in London. It was started a fortnight ago, and I hope that institution may have a very great future. There are hundreds and even thousands of languages in Africa, and the problem has always been to select those which our administrative officers should learn. We want to find out on a scientific basis which languages have the widest affinities and are best worth while preserving. But the bureau is not limited to languages and will include the study of African cultures.

A similar reply might, I think, be made to the remarks of the last speaker—but one, who accused us of standing aloof from the natives. British characteristics are different from those of the Latin races, who appear to have little or no colour prejudice and treat the natives on terms of social familiarity. That does not, however, mean that they have greater sympathy with them. I think the success of our colonies in countries inhabited by these races has been the entire sympathy of the administrative officer with the people under his charge. Sometimes he is passionately

enthusiastic regarding them, but he preserves, nevertheless, that characteristic of the Anglo-Saxon and Nordic races—a certain exterior and superficial aloofness, which does not mean that he is aloof from them in feeling and sympathy.

On behalf of us all I tender our thanks to Professor Earle for his paper, and to the other speakers for their valuable contributions to the discussion.

DELEGATES' MEETING.

A preliminary meeting of delegates of the Universities of Canada, Australia, New Zealand, and South Africa was held at No. 50 Russell Square on Friday, 9th July.

Sir Matthew Nathan was called to the Chair.

The Secretary informed the delegates that the term of office for which, at the Congress of 1921, the several Dominions had appointed members of the Bureau Committee would end with the Congress about to meet in Cambridge.

It was agreed to nominate to the full Delegates' Meeting at Cambridge for appointment as representatives of *Canada*, Dr H. Marshall Tory and Dr J. George Adami; as representative of *Australia*, Professor J. T. Wilson; as representative of *South Africa*, Mr T. Loveday. The Secretary reported that the Registrar of the University of New Zealand had informed him in a letter which he had received in March that the Chancellor authorized him to state that it was the wish of the Senate that Mr J. W. Joynt should continue to be the representative of the University.

A preliminary meeting of delegates of the Universities of India was held at No. 50 Russell Square on Monday, 12th July.

Sir Jagadis C. Bose was called to the Chair. The following letter from Sir Michael Sadler was read:—

THE MASTER'S LODGINGS,
UNIVERSITY COLLEGE, OXFORD,
7th August 1925.

MY DEAR HILL,—At the last Universities' Congress the representatives of the Indian Universities were so good as to elect me as their representative on the Universities Bureau.

It has been a great pleasure to me to do all in my power to further their interests during my term of office, but I have decided to ask them to relieve me at the next Congress from the duties of the office to which they kindly elected me.

I am giving you early notice of this decision in order that you may mention it to the Indian representatives when they assemble for the Congress.

Believe me,
Yours very truly,
(Sd.) M. E. SADLER.

Dr Alex Hill,
Universities Bureau,
50 Russell Square, London.

The Secretary was asked to convey to Sir Michael Sadler an assurance of the delegates' sense of the high value of the services which he had rendered to the Indian Universities, not only as their representative on the Bureau Committee but in other and even more important ways.

It was agreed to nominate to the full Delegates' Meeting at Cambridge, for appointment as representative of India on the Bureau Committee, Sir Theodore Morison.

DELEGATES' MEETING AT CAMBRIDGE.

On the motion of Sir Matthew Nathan, seconded by Sir Jagadis C. Bose, Sir Donald MacAlister was elected to the Chair.

The Chairman asked the delegates if they were prepared to receive the Report of the Bureau Committee which was already in their hands, to approve it for circulation, and to direct that it be entered in the Minutes of the Delegates' Meeting.

It was, he stated, in his opinion a record which very fully established the wisdom of the action which was taken when it was founded in 1912 and continued in 1921. It justified their confidence in its usefulness in the future.

The Report was received and adopted by acclamation.

The Chairman then read to the meeting seriatim the resolutions adopted by the delegates to the first Congress, which met in London in 1912, and asked that, in so far as they were still effective, they be affirmed or amended in such manner as in the opinion of the delegates might appear to be desirable in each case.

No amendments having been proposed, the resolutions were affirmed.

The Chairman then stated with regard to the following resolution, which was proposed on the recommendation of the Bureau Committee in 1921 and carried *nemine contradicente*:

That, if no woman be appointed to the Bureau Committee as representative of a University or group of Universities, power be conferred upon the Committee to co-opt one or more women as assessors ;

that it was considered by the Executive Committee of the Bureau at their meeting in December 1921, "when after discussion it was postponed for further consideration at a subsequent meeting."

The matter was further considered at a meeting of the

Executive Committee in March 1922, at which ten out of the fourteen members of the Committee were present. In the course of discussion it was pointed out that the recommendation to the Bureau Committee which was made in 1920 by the Women's Advisory Committee of the Bureau (subsequently discharged), that a woman be added to the Committee, originated in a misapprehension of the functions of the Committee which since the establishment of the Standing Committee of Vice-Chancellors and Principals has been chiefly concerned with the administration of the Bureau and the management of its finances, and that as things now stand it would scarcely be a compliment to ask a woman to accept the office of assessor, seeing that the office would not, as the delegates who supported the resolution at the Congress probably supposed it would do, entitle the holder to take part in the counsels of the Universities. It was further pointed out that if at any time a matter specially concerning the interests of women, as apart from those of men, appears amongst the agenda of a meeting of the Standing Committee of Vice-Chancellors and Principals, it is open to any member of the Committee who is also the Executive Head of a University to send a woman as his deputy to the meeting; and further, that should such a subject be proposed for discussion the Standing Committee would, in all probability, follow the course which has been adopted when other sectional interests have been involved of inviting representative women to meet them in conference. It was resolved that for the present no action be taken to exercise the power conferred by the resolution adopted by the delegates to Congress at their meeting on 5th July 1921.

The Chairman then read the names of the men whom the delegates of the various Dominions had at their meetings in London resolved to nominate to the meeting for appointment to the Bureau Committee. In every case the nomination was approved and adopted.

The Chairman then stated that the Universities or groups of Universities of Great Britain and Ireland would, during the course of the coming Michaelmas Term, be asked to appoint their representatives, and the appointment of a joint representative of Malta and Hong-Kong would be referred to the Universities concerned.

MR RATHBONE: This meeting affords an opportunity of which I am sure we should like to avail ourselves, of moving votes of thanks for all that has been done on our behalf.

THE CHAIRMAN: So far as our hosts at Cambridge are concerned, the whole Congress will do that formally at the last meeting, but there is a duty which we must discharge and can most appropriately discharge to-day, at this meeting, not of the Congress as a whole, but of the delegates of all the Universities of the Empire. I have ceased, myself, to be a member of the Universities Bureau, but as Chairman of the Vice-Chancellors' Committee, elected and re-elected more times than I liked, I have had to use the services of the Bureau and of the Secretary and Assistant Secretary more than anyone else, and I should wish this meeting of delegates (of which I am one, as representing Glasgow) to express to Dr Hill and Mr Dawson our appreciation of the devotion which they have given to the work—a devotion which is not affected to the slightest degree by any benefits conferred on them in an official way, but is inspired by a desire to make this central bond of the Empire one which will radiate to all parts of it. I ask you to give a special vote of appreciation to Dr Hill and his staff, especially the Editor of the *Year-Book of the Universities of the Empire*.

SIR PHILIP HARTOG: On behalf of one of the distant Universities, the University of Dacca, I wish to say how emphatically we endorse what you have said. We regard the work of the Bureau and the publication of the invaluable *Year-Book* as being really of the greatest importance to all of us. I heartily endorse all you have said of the admirable work of the Bureau.

Called upon to reply, Dr HILL said: I have no reply to make because it is, as you indicated, a labour of love, and at my age it is very pleasant to have an occupation of the kind in which one is heartily interested and to which one is willing to give up all one's time. I thank you very much, on my own behalf and on behalf of my devoted assistants in the office in Russell Square.

THURSDAY, JULY 15—Morning Session.

CHAIRMAN:

THE RIGHT HON. LT.-COL. SIR MATTHEW NATHAN, G.C.M.G.,
R.E., EX-CHANCELLOR OF THE UNIVERSITY OF QUEENSLAND.

**“Mutual Recognition of Examinations and of time
spent in Study elsewhere.”**

FIFTH SESSION.

THE CHAIRMAN: Probably most Universities pride themselves on having a special character. None would think itself quite like the rest and, though any would yield precedence to others in one direction or another, there is probably none but would claim peculiar excellence or even superiority in one or more special lines of study or methods of imparting it. As representing here, and having formerly represented within the great State of which it generally directs the education, what is probably the youngest University of note in the Dominions, I can say that the University of Queensland is not without hope of becoming famous for some special directions of learning, possibly connected with the forms of life that predominate under the peculiar conditions of its long line of coast, and the earth movements that have produced and are producing these conditions. It is even possible that ultimately some influence on methods of instruction may result from the unique position of the University in drawing a proportion of its students from a white race domiciled in the Tropics.

If the new University has so direct a sense of containing within itself the germ of distinctive aims and methods that may in some distant future have a large importance, it can easily be understood that the old University, of which the aims and methods have affected the outlook of the world for many centuries in the past, is not disposed to abandon, even though it may be prepared to modify on the basis of its own experience, the distinctive characteristics and standards that have stood the test of time in favour of others lacking that individuality in which the University has come to great reputation. On the other hand, educational bodies that have trained on other, and what may appear to them more practical or modern, lines than those along which a particular University has specialized, may be anxious to get for those who have been their students the culture that has come directly or indirectly from that specialization. And apart from that particular culture there may, at the University that has given it, be other advantages not derived from it that may exert an appeal to, or on behalf of, those who have been trained without thought of it. The advantages of throwing wide open the University of a rather specialized character may not be entirely on the side of those to whom ingress is thus facilitated. It may be claimed by the other side that to such a University it may be advantageous to get raw material of wide variety, and especially with the vigour

of a fresher existence lived under freer conditions. To the extent that this view is accepted, both the University of special character and the training institution of general direction will be alike interested in access to the former from the latter on such a compromise as will prevent a distinct loss of personality to the University or definite restriction of field to the training establishment. I have possibly most in mind, at the moment, the school offering for entry to the University fine material with the scope and standard of knowledge that the school is giving to its students generally and not only to proposed University entrants, and the University desirous of taking advantage of the material without sacrificing the selective power that high competition gives it to maintain its own views as to scope and standard. The same problems arise not only as regards entrants from school to the University at the beginning of its course, but also as regards undergraduates from another University entering at a later stage, and even as regards graduates coming from another University for purposes of post-graduate study. In each case where former studies have not been directed or tested or both by the University which is ultimately to assume responsibility for certifying the student's scholarship, there is difficulty in getting the scope and standard of knowledge in accordance with the University's views. The insistence of the Universities of Oxford and Cambridge on a classical matriculation subject, and of London on its own test as to general standard, the objection of the standing committee of Vice-Chancellors to articulating the latter part of one University's curriculum on the earlier part of the course of another University, and the general restriction by home Universities of post-graduate courses to members of "approved" Universities are all instances in which this difficulty is recognized, and in which measures have been taken by Universities to safeguard their own ideals of education. The extent to which these or other similar measures are essential to maintaining the old Universities up to their full vigour and intent will be discussed here to-day. It is, of course, mainly a question for the Universities concerned and for the schools desiring additional facilities from them. It has, however, a rather wider aspect. It is in the general interests of the Empire to have a similarity in the functioning of all its institutions that will make them familiar to people from all its parts and so of greater appeal than corresponding institutions elsewhere. While it is a good thing for young men of the Dominions and India to attend their own Universities and so to get the learning that, as it were, is natural to the soil

and also, an important item, to make their best friends those with whom they will be associated in after-life, it is also good that the finest of these fresh intellects should have every chance of obtaining ripeness where the sun of learning has longest shone in the modern world, of bringing ideas from the countries of their origin to the Empire's centre, and of taking back to those countries the Empire's widest and most trained outlook.

If this session of the Conference results in it being made easier for the parts of the Empire away from this island to throw more into and to take more out of the Empire's common stock of learning, it will serve a great purpose.

Discussion.

SIR PHILIP HARTOG (Dacca): You, Sir, have set out in an admirable form, if I may say so, the great advantages of a wise policy in this matter of mutual recognition. Such a policy as you have suggested is twice blessed. It blesses him that gives and him that takes. I venture to think, having seen this matter first of all from the point of view of the home Universities and later from the point of view of the overseas Universities, that the general policy adopted by the home Universities has been on the whole a wise one. But there are certain anomalies in the regulations of some of the Universities to which I shall venture to draw attention later. I think that those anomalies have arisen very largely from too much attention to detail, and from the overlooking of certain broad principles which I suggest for your consideration and approval or criticism.

I think it is generally admitted that any *exact* equation of the examination standards of different Universities is impossible. To those who have gone carefully into the matter it is a commonplace that no two examinations, even in the same University and of the same kind, are exactly equal. Different examiners have different ideas. Nor is that all. The same examiner is not a constant quantity. I alluded yesterday, in an interesting discussion presided over by Sir Donald MacAlister on classes at Honours Examinations, to the fact that Dr Sophie Bryant, herself a distinguished mathematician, had made this experiment on herself: As headmistress of a large school she marked certain papers on history, then put them aside for six months or a year and marked them over again; and she found great discrepancy between her markings on those two occasions. If that experiment were repeated by other persons I am absolutely certain that the same kind of result would follow. Therefore I suggest to you, without insisting at length on the point, that any precise equation of examinations is impossible, and that we ought not to assume it to be possible. Nevertheless, I think that it is legitimate and right that the home Universities should demand that persons admitted to their courses and degrees should produce evidence of having, approximately, the same intellectual qualifications as those demanded from persons residing in Great Britain; and this for two distinct reasons.

First, to ensure that such candidates have had a sound general education. I say a sound general education, but I think we ought to recognize the fact that the elements of such an education must differ in different countries, and that recognition will do

no harm provided that the general intellectual qualifications of the overseas candidates are approximately equal to those of candidates from this country.

Secondly, in the interest both of the University and of the candidate concerned in each case, to ensure that the nature of his (or her) preliminary training has been such as to give the candidate a reasonable hope of success at the final examination.

Sir Matthew Nathan has alluded incidentally to the requirements of the University of London in regard to matriculation. It was my fate to preside for a time over a special matriculation examination held in London for overseas candidates, and one of a very different character from the ordinary matriculation. It was of a simpler character, and we discussed each case at a meeting of the examiners immediately after the written examination had been held. In all doubtful cases I put this question to the examiners: "Do you think this man would be wasting his time if he entered for a University degree in London?"—(we were thinking only of the bachelor's degree, of course)—"or do you think it would be unfair to him to allow him to proceed, because he would have not the remotest chance of getting through?" That was the criterion which was applied in all doubtful cases, and it worked very well. So often in the case of an examination we consider marks and details, without considering what the examination really means, and what we can say fairly of the person who just passes (to take the limiting case). This was an exempting examination which gave no particular credit to the candidate; it was not a diploma in any sense. You could define the meaning of the examination by asserting that a person who passed it would have a reasonable chance, after a course of study for three years, of obtaining a degree in London.

I think it is very important, on the other hand, that there should be no idea that there is any relaxation of standards at the final examination in favour of overseas candidates. The degree examination of University X, or University Y, ought to mean exactly the same thing for an overseas candidate as for a candidate from Great Britain, and, if you keep this in mind, I think it will incline you to greater leniency in dealing with admissions, provided that you do not admit any candidate who, if admitted, will go on to certain failure. I think that there is, perhaps, some little misunderstanding on the part of University authorities in this matter, in that they assume an ignorance on the part of the public which does not exist. They suppose that

every person who takes a higher degree in a certain University will be assumed by the public to have pursued his studies in the ordinary way as if he had come from this country. I suggest to you on the contrary that, when a man places his credentials before a governing body as a candidate for a post, they will be perfectly able to distinguish between the academic qualifications of a man who has taken his B.A. at University X and his Ph.D. at University Y, and a man who has taken his B.A. at University P and his Ph.D. at University Q. It is unnecessary, therefore, for Universities Y and Q to trouble themselves overmuch with the precise standards at Universities X and P provided that they maintain their own standards, without any relaxation at their final examinations.

I have said something regarding exemptions from matriculation. I want now to say a single word with regard to exemptions from portions of the course of study. Here the investigation needs to be a little closer. The home Universities, I think, suffer very often from a want of acquaintance with the detailed regulations of the Universities overseas; at any rate, I can only in that way explain certain striking anomalies which prevail.

Oxford does not publish its list of exemptions, and therefore I cannot give full particulars of the exemptions; but I will say this, that Oxford has failed to recognize the fact that the younger Indian Universities have instituted a three years' Honours course subsequent to the passing of the intermediate examination of which the standard throughout is much higher than that of the two years' Honours course in the older Indian Universities, such as Calcutta.

The Honours course at Calcutta is a two years' course and differs only from the Pass course by the addition of certain subjects. At Dacca and Lucknow the course is a three years' course and is of a higher standard throughout. I give Dacca as an instance because I know it best. What we did there was, after the end of the first year, to turn out anyone from the Honours course who was unlikely to get an Honours degree, and, as I explained yesterday, we have no third-class Honours at Dacca, so the Honour test is a really serious one. The standard of an Honours degree at Dacca and Lucknow, given after a three years' course, is higher than that at one of the older Universities after a two years' course. That is a simple fact which has been entirely ignored by the University of Oxford.

At Cambridge there is only a small list of recognized Indian Universities. I venture to think that that list might very well be enlarged. I know the University of Patna has been knocking

at the doors of Cambridge, and I hope they will be opened to it : and that the case of Delhi will receive full consideration.

But I would like to speak of another University, with a character of its own, the Osmania University at Hyderabad. At that University the language of instruction is Urdu, but English is taught as a compulsory second language. Now it may be that the average knowledge of English on the part of the Osmania candidates is inferior to that of candidates from Universities where English is used as the medium of instruction. All I can say, from my knowledge of Osmania candidates in the past, is that the English of those who come to us at Dacca was remarkably good and far higher than that of the average candidate in Bengal. We had, of course, only selected candidates, but only selected students would come to the British Universities in any case.

I have been asked by the Indian Inter-University Board (recently constituted at the suggestion of the Universities Bureau of the Empire), which includes all the Indian Universities except Calcutta and Lucknow, who stayed out for reasons never made clear to us, to put the case for the Indian Universities. I have suggested certain points. In the quarter of an hour allotted to me, I cannot go through the list of Indian Universities and deal with them one by one; but, if the principles I suggest are adopted, greater and more uniform justice will be done to Indian students.

Before I sit down I want to make one remark about research degrees. If we look at the regulations set out in that invaluable publication, the *Year-Book* of the Universities of the Empire, we find that most of the home Universities deal on its merits with each application from a candidate who wishes to proceed to a Research degree. I think that is absolutely the right principle. In the University of London recently the regulations have been rather stiffened. They differ in different subjects; each Board of Studies has some autonomy in this matter, I am told; but I should like to give an example from the English School.

The School of English has decided that it will not admit anyone to a course of research without insisting on his passing a general examination in English Literature. A young man from India, whom I know well and who took a second-class M.A. at one of the weaker Indian Universities, but who has been a most successful teacher and has written one or two valuable papers, found that he was not exempted from that examination, and told me he felt almost like committing suicide when forced to face the examiners within a week of his arrival. There were

four other candidates. As a matter of fact he passed very well, whereas two candidates whose mother-tongue was English both failed. That is an example of how wrong it would be to debar a man like that, who is doing extremely well, from entering for a Research course, because he only took a second-class M.A. at one of the weaker Indian Universities. I therefore plead that we should continue the present system; that the relevant Boards should interview each candidate, if necessary, and make up their minds as to the merits of each individual candidate, and not attempt to come to a decision purely and simply on the basis of the examination which he has passed.

I suggested earlier that a wise policy in this matter is twice blessed. I should like to remind you that that great physicist, Sir Ernest Rutherford, who occupies the Cavendish Chair of Physics in Cambridge, came to England from New Zealand; and that his college friend and rival was Sir William Marris, who, after distinguishing himself at Oxford, has lately become Governor of an Indian Province with a population of over forty million people. India has not yet, I believe, contributed any professor to an English University, but from what the experts tell us, Ramanujam, that young mathematician of genius who came to Cambridge after failing at the intermediate examination of the University of Madras, might well have aspired to a Chair even in this home of mathematical science. And I can assure you that in India there are many young men who, though they may not be orators like the two speakers who addressed us yesterday, are quietly and modestly accomplishing work which will be a credit to the Empire, and whom we ought to encourage in every way. The recent foundation, by Sir P. C. Rây, of the *Journal of the Indian Chemical Society* affords ample proof of their existence.

MR WYLIE (Oxford Secretary to the Rhodes Trustees): I was interested in what Sir Philip Hartog said about the Indian Universities, but it is not my province to talk about them. My own work has been with Rhodes Scholars, and my familiarity is with their problems. There are no Rhodes Scholars from the Indian Empire: so, though I have been present at certain discussions at Oxford of a committee which considers these questions generally, I have no precise knowledge of the conditions in Indian Universities and, beyond knowing the tone and atmosphere of these discussions, and that Oxford is trying to meet the Indian situation sympathetically, I cannot pretend to a knowledge which would justify me in discussing here any

decisions at which the sub-committee which considers the Indian Universities may have arrived. I confine myself, therefore, to Rhodes Scholars, and to the question of the "credit" which they can get at Oxford for work done at Universities in the Dominions.

Rhodes Scholars normally read in the first instance for our ordinary B.A. degree with Honours. Some few of them do, no doubt, get admitted forthwith to read for an advanced degree; but not as many as would like to; that is to say, a certain number think they are prepared to research, but do not succeed in convincing the University authorities that they are justified in that belief. So, normally, in the first instance at any rate, they read for the B.A. degree. That does not mean, however, that they may not do a bit of research before they leave, because, as conditions are, they can complete their degree course and take Honours in two years, and profitably spend their third year (if they cannot stay longer) in doing a piece of special work, probably for one of our smaller Research degrees, *e.g.* B.Sc. It is, however, in relation to the B.A. degree that the problem of "recognition" arises for our Rhodes Scholars.

That degree, as you know, implies a three years' course of study and three examinations, the ordinary Responsions, some intermediate examination, and the final Honours examination.

I agree with what has been said already as to the impossibility of equating in any formal or mechanical sense examinations, or even courses of study. In relation to Oxford that is perhaps more true than in relation to some other Universities. The intermediate examination to which I have alluded can be disposed of at any time between the beginning of the first year and the end—at latest by the end of a man's first academic year. After that there is no examination until the final Honours examination, covering the whole of the work of, on the average, two and a half years. There are no annual examinations: nor is there any organized succession of work. The work, that is, is not organized in such a way that you can really point to any definite pieces of work and say, "That corresponds to the second year and that to the third year." The whole thing is, in a sense, too fluid for that. It is not, therefore, workable that a man should come to Oxford from a University the methods and curricula of which may be different from those of Oxford, and which relies, it may be, upon annual examinations (as so many do in the Dominions), and claim that, having passed certain examinations or done certain work corresponding to the first two years, he should be allowed to "enter the third year" at Oxford. That phrase may be intelligible, and the claim proper,

where Universities are organized on a similar basis, as are Universities in the United States, where it is often possible for a student to enter the third year at one University on the basis of two years at another. But such procedure has no meaning at Oxford, for the reason that, for the last two and a half years of their course, the men are studying a *subject*, without examinations, and that even the study of the subject is not actually done in such an organized way that all the individual students are doing the same work at the same stage in their career.

That being so, the question is, what "credit" can we give the overseas students, in whom many of us are interested? The *maximum* that they can be given is exemption from any examinations short of the final one (which is the test of the whole thing, and which it is not suggested should be omitted), and, as credit for a certain amount of study elsewhere, exemption from a certain amount of residence at Oxford. As I have already told you, the residence at Oxford for a degree is three years. The residence which is remitted to overseas students who get "standing," whether senior or junior, is one year's residence, which means that they are in a position to take their degree in two years. That is the maximum credit possible.

The question then arises, to whom should that maximum credit be given? The answer to-day is, to anyone who has an "approved" degree at an "approved" University. And the responsibility for "approving" degrees and Universities rests with the Hebdomadal Council. As regards Universities, practically all the larger ones in the Dominions—and it is with the Dominions that we here are mainly concerned—are for these purposes "approved"; all the six Universities of Australia, all the four Universities of South Africa, the University of New Zealand, and all the larger Universities (some twelve or thirteen in all) of Canada. So far, then, as recognition of Universities in the Dominions is concerned, the overseas Rhodes Scholars have no ground for complaint.

What degrees does the Hebdomadal Council approve? To-day it recognizes any degree in Arts, or any degree which represents a sound education in general or Pure Science. It does not recognize for its purposes degrees which are specifically technical or professional. In recognizing any degree in Pure Science, Oxford has made an advance in the last few years; and, from the point of view of those who wish for generous recognition, this has been, no doubt, a popular decision. Before the War it took up the position that the kind of education which should have been pursued by the man who could claim senior standing

must have been "equivalent," in the formal sense that it must have included any subject from which he was to gain exemption at Oxford, and that that subject must have been pursued to the same point, so far as could be ascertained. That was interpreting equivalence in the formal way, from which Sir Philip Hartog said we ought to get away. Oxford has, since 1919, got away from that, because it recognizes or "approves" for senior standing degrees in Science. It does not demand that the same subjects shall have been pursued as those from which exemption is given: nor does it lay down that any subject is essential. No language is essential. So long as the education represented by a degree is a sound general education, in Science or in Letters, Oxford, through the Hebdomadal Council, has accepted the principle that it will acknowledge such a degree as qualifying for senior standing. It does not recognize professional or technical degrees.

The general result is that a student from any of these overseas Universities, if he has studied there for three years and taken a degree in Arts or General Science, can get off all examinations at Oxford except the final examination, and take a degree in two years.

Are there any extensions of generosity which the Dominions might suggest?—for I do not wish to exclude that possibility. It seems to me that they might suggest any one of three things.

(1) That a degree need not be necessary. As a matter of fact Oxford did try before the War to frame conditions on which this standing should be given to men who had been at the University for three years and had "taken Honours," though without a degree. This did not work satisfactorily, and, now that the Oxford authorities have abandoned the demand for Honours, they think it better to ask for a sound general education represented by a degree.

(2) That they should recognize professional or technical degrees. I do not think many people here would wish them to recognize a specifically technical or professional degree as a substitute for a general education. Most people would, I think, sympathize with Oxford in saying that, in so far as a degree is genuinely professional or technical, it must not claim to stand for, or to be a ground for exemption from, the general education which should be preliminary to the B.A. It is only fair to Oxford to say that they are attempting to work their principle sympathetically. There have been a few cases recently in which they have satisfied themselves that a degree, which in title and main purpose may have been professional or technical, has yet included

a sufficient amount of prescribed general work to justify recognition. I think there are three medical degrees in Australia, one medical degree in New Zealand, and one medical degree in Canada, which have been admitted as qualifying for senior standing, and so as exempting from a certain amount of the ordinary study preliminary to the B.A., the reason being that these degrees, while professional in appearance, do contain a sufficient amount of general work. On the same ground they have recently recognized one degree in Engineering, which at first they refused, but which, on reconsideration of the curriculum, they accepted; and one degree in Applied Science; the principle being in each case that there was a large amount of preliminary general matter. I quote these instances as suggesting that Oxford is trying to apply its principles in a broad way and in no merely formal spirit.

(3) That they might relax the two years' residence leading up to the degree. That is opposed to the fundamental principle of the Oxford system, which is that the B.A. Honours degree stands, not for passing this or that examination, but for a training or course of study—almost, you might say, a way of life,—and, interested as I am in the scholars who come from the Dominions, I should yet regard it as a most unfortunate generosity if Oxford ever thought of reducing the minimum of two years' study at Oxford necessary for the Honours degree. Fortunately there is no chance of any such reduction.

PROFESSOR HOLME (Sydney): I wish you to regard my few remarks as merely an interlude in these proceedings, as having reference only to one particular aspect of the subject under consideration. Mr Wylie's most interesting and valuable address sorely tempts me to go beyond the limits I set for myself. If things elsewhere were as they are at his University, then the statement which I am about to make would not have been prepared. I apologize for taking up a few minutes of your time to say a little that ought to be said on this subject from an Australian point of view.

The University of Sydney joined in suggesting our topic, not because it needs very wide discussion of a general character, but because the Australian representative on the Committee of the Universities Bureau, Professor J. T. Wilson of Cambridge, was maintaining with that University a position of importance to Australia. Professor Wilson could not persuade Cambridge to continue one of the privileges most valued by the Australian Universities which are "affiliated" to Cambridge. This result

was disappointing. It means that Australian students may not count a period of even two years or more of studentship in their own country as equivalent to one year of the Cambridge curriculum. It means that we have all suffered a reduction of status at Cambridge.

More specifically stated, the fact is this. Holders of our first-class Honours degrees are still eligible to proceed to a B.A. degree by way of the Tripos examinations after having kept six terms at Cambridge instead of the full number of nine. The Ph.D. degree also is freely open to our graduates when they have been accepted as competent Research students. Even second-class Honours graduates are treated like those of the first class if they comply with a further condition to which I do not wish to take any exception. All this is gratifying and characteristic of Cambridge.

But now for our disappointment. We have met, after many years, and apparently without evidence of failure in the old system, a blunt refusal to make any reduction in the time of study at Cambridge for all our other *graduates* and for all our *undergraduates* of advanced standing. This hurts, and I desire to support Professor Wilson's protest against the abrogation of a privilege which in respect of our graduates constituted a recognition of academic status that was highly appreciated by affiliated Universities overseas. The change does not concern Australia alone.

Of course I know that the change itself purports to embody a concession and was apparently intended to meet the case of any distinguished overseas graduates, who could not completely fulfil the entrance requirements of Cambridge, but desired to proceed to an Honours B.A. degree by way of the Tripos examination. An occasional deficiency in one of their entrance subjects has been generously overlooked.

Yet I must admit, as strongly and as respectfully as I can, that there is now an undesirable and unnecessary confusion between the privileges of affiliation, which privileges ought to belong to all members of an affiliated University, and the privileges relating to the admission of a small and select body of highly qualified postulants for an Honours degree or for a Research degree. Here there are two sorts of privilege, and there is no logical ground for saying that one sort should exclude the other sort, as it now does. To this extent Cambridge has reduced the status of its affiliated Universities and has refused to act as a mother of Universities overseas.

My representations are not based upon thought of the number

of students thus prejudiced, but upon regard for Cambridge and upon desire for the old happier relationship. Nearly all the Australian students who come here will be, as they have been, good Honours graduates, and most of them will be, as they have been, able to satisfy all entrance requirements. There still remains a class of lower Honours graduates, pass graduates, and senior undergraduates, to whom it would be just and imperially helpful, and therefore becoming to make a slight concession.

All we ask is the restoration of the old privilege, so that graduation in one of our Universities might still entitle Australians to proceed to the Cambridge degree in six terms instead of nine. We should very much welcome a similar allowance of time to our undergraduates who have completed two years under our curricula.

You must not think that I am advocating the migration of undergraduates from overseas to the Mother Universities, though I cannot agree with those strange imperialists here, and those short-sighted nationalists in the Dominions, who believe that such an interchange of the young citizens of our Empire is a bad thing. To me it is not a generally practicable thing, and not a necessary thing. Sometimes it does become vitally important to some individual student and the family to which he belongs. Australia is populated almost wholly by families whose original home was in the British Isles. Many of them for business, professional, or family reasons return hither with young members not yet out of their period of educational training. Must these, at Cambridge, begin all over again as freshmen, even though they may hold a first degree from us?

Is that really necessary? And are our Universities really so little esteemed? They surely cannot have been deprived of a privilege that they valued because of some unworthiness they had developed unconsciously.

We look to Cambridge, which has always been in other respects so liberal of policy, in the hope that we may be spared a long infliction of the sentence of exclusion. This is not a time to break any of the links that bind us in mutual respect and helpfulness. So far as mere entrance requirements are concerned—cannot you tell us what Cambridge demands, and let us fail to comply with them at our own peril and loss? Cannot you let our ordinary graduates know that they may have the old privilege if they will carefully comply with the old requirements? Please do not treat them as if, after all we have tried to do for

them, they are no further on than if they had just left a secondary school.

MR BUTCHART (Aberdeen): This question seems to divide itself into three parts:

- (1) The recognition of entrance or matriculation qualifications.
- (2) The recognition of undergraduate work.
- (3) The recognition of a degree for post-graduate work.

With regard to (1), on the whole the regulations are such as ought to satisfy the Dominions as well as the Universities of this country. The Scottish Universities, as you probably know, as far as entrance is concerned are under a Joint Board, known as the Scotch Universities Entrance Board. They are prepared to accept any qualification which satisfies the Board that the student has had a good general education. No more, I think, could be demanded.

With regard to (2), in Scotland full value is given for work done in the Dominions overseas. In all our first degrees, excluding the degree of Medicine, one year's recognition can be given to an approved University. On the whole, I think that is all that the Dominions can reasonably demand. After all, the object of coming to this country for a degree is one of wider education as well as academic qualifications. That is to say, the study of the life and characteristics and habits and psychology of the people at home is of equal if not greater value to the student's gain in purely academic knowledge. If, then, the student is to have a University degree of this country, and if the degree course extends over three years, it is not too much to say that the majority of the work for that degree should be performed in the University granting it.

So far as Scotland is concerned, one year's recognition is given for practically the whole of our degrees, provided the Senatus is satisfied that the University is one worthy of recognition.

With regard to Medicine, all the Universities of Scotland have agreed to recognize two years' study elsewhere. The examinations of certain approved Universities, and in Aberdeen the University of Cape Town, are recognized.

With regard to (3), in the case of the Ph.D. degree, the most universal of the degrees in this country, in Scotland, provided the University is satisfied that the degree is of sufficient standing, any student will be admitted to a Research degree. There, again, I think the Dominions have all that can be required.

It is in the interests of the Empire to encourage people over-

seas to take a degree in this country. At the same time I am not clear that it is advisable for Indian students to come here for a first degree without any experience of any University beyond their own.

MR P. K. SEN (Patna): In the illuminating speech with which Sir Philip Hartog introduced the subject, he divided the examinations under discussion into two groups: firstly, those examinations which, like the Previous or Responsions, serve as a passport to an undergraduate course; and secondly, certain other examinations which serve as a passport, not to an undergraduate course, but to a post-graduation course like the Ph.D.

With reference to the first class, there are certain obvious hardships which certain Universities in India suffer from, and I wish, with great humility, to submit those to the representatives of all the Universities and the authorities of Cambridge in particular.

It is quite true, as Sir Philip Hartog himself said, that a certain standard must be maintained; but there are certain, perhaps inevitable, anomalies which have crept into the rules and regulations passed in that behalf. Take a person who has passed the intermediate examination in any of the Universities in India in the first class; then he is admitted to the privilege of being an affiliated student here. He is excused three terms and also excused the Previous examination. He enters upon his course here straight away, and, if he likes, he may take his Tripos examination at the end of six terms. Similar privileges are extended to a person who has passed the B.A. or B.Sc. examination of an Indian University with Honours, and an M.A. is on the same footing. So far it is perfectly reasonable, and there is no possible complaint that can be raised.

But the difficulty arises here. Take, for instance, a person who has passed the intermediate examination, not in the first division but in the second—and over and above that has taken a three years' course at the Engineering College or at the Medical School. He has passed an examination which does not confer on him the B.A. degree, but has carried on his studies for three years and may be good at Mathematics, or at Physics, at Chemistry, at Biology, etc., yet when he comes to Cambridge he must pass his Previous examination, and until he has done so cannot be admitted to the University. Cases of great hardship also occur when a man comes in October, because he must pass his Previous before he can be taken in, and two or three terms may pass during which he does nothing at all. It is not for me to say

what should be done; the Cambridge and Oxford authorities are able to improvise measures to meet the exigencies of cases like this. But it does seem hard that a man who has passed the Intermediate in the second division, and has carried on studies at a medical, or engineering, or other college and has got to an advanced stage, should be called upon to sit for the Previous, or should not be excused one year which an ordinary B.A. with second-class Honours would be entitled to.

The next question arising is in regard to the examinations which should serve as a passport to a post-graduation course. Sir Philip Hartog has already touched upon that. What we want is simply this, that there should be a certain reasonableness. We cannot possibly indicate what should be the manner in which our examinations should be recognized. We leave it to the authorities. But if only there were more knowledge as to the details of the examinations which these students pass before they come up to the Universities, it would be easier for the authorities to deal with these problems.

I fully agree with Sir Philip Hartog when he says that, so far as the final examination is concerned, nobody asks for, or could expect, any relaxation in the present standard. All that is wanted is that students coming from other intellectual centres should, without any unnecessary restrictions, be allowed to avail themselves of all the privileges and advantages which a stay at Cambridge or Oxford or any other English University alone can afford.

DEAN MACKAY (McGill): I really do not think there is anything significant which I can add to the very fair and clear statements to which we have already listened. I am also very much afraid that we shall never arrive at any very definite conclusions, for the simple reason that, as I imagine, there may be a profound psychological fallacy underlying nearly all these discussions on credits, recognitions, and educational measurements. Is it not surprising how we attempt to weigh and measure things, in themselves imponderable and immeasurable, only to find that there seems to be a mathematical impossibility in arriving at any equivalence of standards at all? In Canada and the United States at the present time a marked reaction is setting in against all this machinery—a very marked reaction indeed, and this reaction is of some interest to us at McGill, which is, I imagine, the most cosmopolitan of any of the Universities overseas.

Three years ago we had 352 students in my college; last year we admitted 1094. Three years ago there were 152 in the

freshmen class; last year we admitted 452 and rejected over 270 who were otherwise qualified to be admitted. So you see the whole question of standards has become very acute with us, and, without discussing the thing at great length, I think we have practically come to the conclusion that there is no use at all in trying to establish scales of measurement. We are now attempting to deal with each student on his individual merits. Every student has to make an application for admission, which is considered very carefully by the head of the college and a committee. Any first-class student from any institution in the world who proves the will to achieve a University education is admitted. We are trying to apply Sir Philip Hartog's ideal that, after all, it is generous personal regard for the merits of the individual student, with some consideration for what we know of the institution in which he has been trained, that are of real importance.

Last year, at the beginning of the term, we actually had to interview over 300 students personally for about fifteen to twenty minutes each, incidentally giving them a little intelligence test. I notice that nobody has raised the question of intelligence tests. I firmly believe in a general intelligence test. It may not work out in terms of psycho-physics; but the intelligence test is helping us to rediscover the individual, and that is great gain. The head of McGill College undertook last year to examine in this way 300 candidates for admission. It was a long task and a difficult task, to equate the merits of the individual student, marking even the twinkle in the eye; but there was no doubt whatever about the result of the method adopted when it came to the examinations, because about 100 students who usually cost us a great deal of trouble were not there at all. After all, it is the personal relation between the parent and child and the personal relation between the institution and individual student which really count. It is of personal relations that the whole community is compounded, and these relations cannot be measured. Unless, however, we go to the labour and expense of doing this work thoroughly in the way that I suggest, I doubt whether we shall arrive at any solution of this problem.

With regard to equivalents for overseas and home students, that is still more difficult, because the methods, the environment, and the life of the Universities in these islands, especially in Oxford and in Cambridge, are so very different from those obtaining in most of the Dominions. There, again, is a vital principle which you cannot measure.

I don't think we have any complaints to make at McGill. We have sent about 150 Rhodes*men from Canada since the first one came in 1903. Personally, I think I know about 40 of these 150 men. I do not believe that it is worth while for a man to join a University unless he is prepared to stay at least two years; unless it be the nomad student who wants to go from University to University, from year to year, and I do not see why he should want a degree at all. He is sometimes the best student *en ronde*, but he does not as a rule need to work for a degree.

There is one political question in Canada to which I think I might refer; I suppose you probably know the answer. It is so much easier for our graduates of McGill, Toronto, and all the other Canadian Universities to find their positions in the Universities of the United States, especially Harvard, Cornell, Johns Hopkins, and others; and they are welcomed with greater warmth than here, because the Canadian student is always a first-class student in America. It is easier for them to get themselves placed in the preliminary way in those great institutions than at Oxford and Cambridge, where the little frictions come in to which Mr Wylie has referred.

PROFESSOR NOTCUTT (Stellenbosch): I want to associate myself with what Professor Holme said in his plea for wider recognition for some of our work in the Dominions Universities. The details, so far as they affect the particular University I have the honour to represent, are slightly different from those that obtain in Australia.

At Stellenbosch we have no separate Honours examination for the B.A. degree. The student may gain distinction (equivalent to Honours) in one or two subjects with which he has to deal. He has only two to deal with at the final stage, but as there is no separate Honours examination we cannot claim a B.A. Honours degree as a ground for admission. The course for the M.A. degree takes at least a year longer.

One feels that it would be better for many students who have passed the B.A. examination with some degree of credit to go over to the Old Country at that stage instead of waiting for an M.A. degree, which would entitle them to ask for senior standing, especially as the men are often at a more suitable age to get the benefit of Oxford or Cambridge than if they delayed going, not to speak of the additional financial expenditure involved in waiting another year. On that ground I think we might ask Cambridge to consider whether it could recognize a pass degree

as a ground for admitting a student to senior standing. They would get more good out of Oxford or Cambridge with two years there and the opportunity of a third year for specialized study.

The other point is that, owing to the difference of our academic year (south of the Line it corresponds with the calendar year) and the fact that the degrees are taken in December, if recognition were given for one term, the student might enter in the January following the time when he took his pass degree in any University south of the Line. He would not lose time, and it would be a great help and would not imply too much recognition of the work accomplished in one of those Universities.

I hope these points may be taken into consideration by those who have the responsibility of settling this matter. While I do not want students to come here when they are not fit to enter, one feels that many of our students are ready to enter upon something approaching senior standing, and that they would get a great deal of good out of it and bring good to the University from which they come.

SIR THEODORE MORISON (Armstrong College): I only want to call attention to what I think has been an important pronouncement made by Sir Philip Hartog. We in the English Universities know that all problems coming from Indian Universities offer great difficulties, and, if we could accept the proposals made by Sir Philip Hartog, they would be useful for us and ought to be made known in India. It is not fair to the Indian Universities at the present moment that they are not quite sure what action will be taken in regard to their degrees and how they will be valued.

Sir Philip has suggested quite frankly something which I think ought to be recognized in India, viz. that, for post-graduation studies, the University, the department, and even the individual professor should be allowed to judge whether a particular student is competent or not to take up a post-graduation course. Do let us make that clear to the Indian Universities. I should like to plead on behalf of the Indian Universities and say that we recognize their Honours degrees and that, if a person can satisfy the professor, or the Faculty, that he is fit to go on with his studies, we will accept the fact that he has taken an Honours degree in India; but that a student must recognize that, when he comes to this country, he must have a personal interview with individual people and must satisfy them that he is competent to take a further course of study,

so that he comes at his own risk and may be turned down. Let it be known in India that these are the conditions.

I should like it also to be generally recognized that for admission to study for a first degree, we do not recognize in this country anything lower than the intermediate degree of India.

Having said that and imposed conditions which, I am afraid, some of the Indians will consider rather harsh, I should like to support Sir Philip Hartog about recognizing some of the newer Universities of India which are adopting methods and standards which we in this country believe to be the right methods, and have discarded methods which were originally inspired by the old London University and have very definitely said they will try something more like the teaching University. These are the new principles inspiring the new Indian Universities, and those who are doing the best work and acting on the only principles that are valued here are, by a strange irony, the only Universities which are not accepted.

May I put in a special word for that latest development of Indian academic thought, the Osmania University? Give it more than a sympathetic welcome—it deserves it—because that University is founded on a frank recognition of the fact that Indian students are tempted to memorise instead of to think. This University has boldly said, “This is a true accusation, and the reason is that you attempt to teach students in a foreign language which they only imperfectly understand. Our Indian students will think if they are allowed to think in their own language.” I believe that is true and very important; there is another great evil we have done to India generally, which the Osmania University is trying to remedy, i.e. that the vernaculars have been impoverished and kept poor by the fact that all the best thought of India goes into English channels and is not communicated to the great mass of the Indian population. In the Osmania University they give a University education in European thought through an Indian vernacular. There are difficulties in the way, because the vocabulary is not yet sufficiently developed for scientific thought, but the necessary terms are being hammered out in the University lecture rooms and laboratories and will become general to the whole country. Please do extend a very sympathetic welcome to the Osmania University.

SIR MOHAMMED RAFIQUE (Osmania): I did not intend to speak in the presence of so many learned men and experts on the question of education. The feeling of diffidence is natural as I

can lay no claim nor have I any pretension to learning or a special knowledge of education. It is true that I stand in this distinguished company as a representative of two Indian Universities, viz. the Muslim University of Aligarh and Osmania University of Hyderabad. But it is not—how should I put it—my fault or presumption on my part that I am here. My presence here is due to the desire of the authorities of the said two Universities, and in the case of one of them I am asked to put up a certain proposal. I hope you will bear with me for a few moments when I address you on the case of the Osmania University. About a fortnight ago or more the Government of His Exalted Highness the Nizam of Hyderabad sent me a cable asking me to represent the Osmania University at this Congress. Last week the Registrar of the University wrote to me officially saying that one of the subjects for discussion before this Congress was the recognition of the degrees of the different Universities of the Empire and asking me to urge, which I do now earnestly, the claim of his University. I may say at once that the Osmania University does not claim any higher status or larger concession than this Congress is willing to award or has awarded to other Indian Universities. The Osmania University is one of the youngest in India and has adopted a plan of education different from the others. It is an institution *sui generis*, as it differs from the other Indian Universities in that it imparts knowledge through the medium of the vernacular of the country. It was founded by the premier Prince in India, admittedly premier in point of income and of territory, and if I may say so without disparagement to the other Princes, in enlightenment also. His advisers, as Sir Theodore Morison has pointed out, thought that the good results which were expected from the Universities in India had not been obtained. What was the cause of it? They came to the conclusion, and I think rightly, that the reason for the defective and, as some thought, doubtful results of education in the case of Indian students was the difficulty of language. I am not ashamed to say that in spite of my acquaintance with the English language for nearly half a century and the fact that I was educated at Cambridge, I cannot claim to know your language to the same extent that I know mine. Indeed I go a step further and admit that, for example, a bad word in your language does not give me the same shock as a bad word in mine. It shows that to an Indian your language and your mode of thought are so essentially alien that it is very difficult for him to acquire a knowledge of English so completely as to

be able to think in it. There are, of course, exceptions. Yesterday we had a speech from Sir Jagadis Bose, who has proved himself capable of not only thinking in English but of doing research work in it. He is, however, one in a million. I therefore ask you to give sympathetic consideration to the proposal of the Osmania University, that its degrees should be put on the same footing as those of other Indian Universities.

THE CHAIRMAN: Very definite suggestions have been made, both on behalf of the students from the Dominions and those from India. I am sure they will have careful and sympathetic consideration.

THURSDAY, JULY 15—Afternoon Session

CHAIRMAN:

J. B. BAILLIE, O.B.E., M.A., D.Phil., VICE-CHANCELLOR
OF THE UNIVERSITY OF LEEDS.

“The desirability of making Provision for the Physical Welfare and Training of Students and the Organization of Athletics with a view to securing more general participation.”

SIXTH SESSION.

SIR DONALD MACALISTER, Chairman of the Standing Committee of Vice-Chancellors and Principals: Members of Congress will learn with great regret that they will not, this afternoon, have the pleasure of meeting under the Chairmanship of the Duke of Devonshire, a title which in Cambridge will always evoke feelings of admiration and gratitude. The following letter written by his secretary, equally with other letters addressed to Dr Hill since the Duke was first asked to preside over one of the Sessions of Congress, shows how great an interest he takes in the Congress and how glad he would have been to occupy even for a short time the Chair which his uncle and great-uncle, as Chancellors of the University, filled for so long to the great satisfaction of everyone in Cambridge:

"I have to tell you, with much regret, that the Duke of Devonshire will not be able to fulfil his engagement to preside at the session of the Congress of Universities of the Empire on July 15th: his doctor, who examined him yesterday, has absolutely forbidden him to do so.

"His Grace desires me to express to you and your Committee his great disappointment at this decision, and to say how sorry he is for the inconvenience which he fears it must cause you. He had been looking forward with much pleasure to this occasion. The doctor's decision, however, was so definite as to leave His Grace no choice but to abide by it."

As the Chancellor of Leeds is unable to preside, I suggest to you that the Vice-Chancellor be asked to take his place.

(Carried by a show of hands.)

THE CHAIRMAN: May I join with you in expressing our deep regret that the Duke of Devonshire, Chancellor of the University of Leeds, was not able to preside this afternoon. Unfortunately he has not sent any notes; my remarks, therefore, will be very brief. Members of the Congress will remember that last year a subject identical with this was taken up. The main points, if I recollect aright, which were raised in the discussion were that it was desirable that more attention should be paid by Universities and Colleges to physical welfare and training, and to organized athletics; secondly, that physical training and organized athletics should be universal and compulsory; thirdly,

that the kind of physical training which any student should take up ought to be adapted to his special requirements.

I hardly think it will be necessary to traverse the arguments that were put forward as regards those particular points last year; no doubt they will come up in the course of discussion. But I trust that those who are dealing with the matter will consider what seem to be really important aspects of the subject under discussion. (1) Deal with it as we please, physical welfare, training, and athletics are mainly subordinate to the main purpose for which the University exists. A University is not an athletic club, nor a sports club. It exists for other ends primarily, and I hope their real subordination to the main purpose of a University will be borne in mind. (2) It seems from the point of view of many British Universities highly undesirable that there should be compulsory physical training or compulsory athletics. The compulsory methods apparently adopted in certain Universities across the seas seem repellent altogether to our instincts. I have grave doubt whether, in principle, compulsory physical training and athletics cannot be regarded as a contradiction in terms, for the whole joy of athletics lies in its freedom.

The third point which I trust will be taken up in the course of the discussion is, what exactly is to be meant by physical welfare and training and organized athletics? We all agree that physical welfare is essential to work, and that the student should take a certain amount of exercise, but nobody would confound exercise with organized athletics or with athletics at all. Organized athletics may be taken to mean simply the necessity of making a contribution by all students to an athletics fund. That is done in most modern Universities. Thereafter the organization of athletics will be left, and is generally left entirely, to the students themselves. Is it proposed that the authorities of the Universities shall take over the organization and conduct of athletics in every sense and form?

These are questions which, I think, deserve consideration, and I trust in the course of the discussion they will be taken up.

Discussion.

PROFESSOR TAIT MACKENZIE (Pennsylvania): I esteem it a great privilege to have the opportunity of opening this discussion. I confess that on reading the title given to our subject I was somewhat appalled by its length, but on careful analysis it seems to me that the length of the title is an evidence of the caution with which the subject has been approached by the Committee, and, in spite of this caution, I feel that the whole discussion must centre round the question of whether or not the University is to assume the responsibility for the physical welfare, the physical development, the direction and control of the athletics of its students.

The University provides the last four years in which systematic education is given. Shall that education be entirely intellectual or shall it correspond more closely with the ideal of an all-round education of physical and mental powers at the same time?

I feel very strongly that the answer should be in the affirmative. It is, however, an easy matter to say yes to a question, but a difficult matter to administer any programme which involves such a responsibility.

Just as a University requires a certain definite examination of the mental ability and attainments of its students, so should it have an examination of the physical ability and standing of students coming to it if it is to assume this responsibility. That is absolutely necessary.

An examination must not be altogether like a life assurance examination or an examination for entering the army, although it partakes a little of both. Its primary object must be to discover those handicaps or weaknesses or defects which are likely to interfere with the successful career of the student while at College and afterwards. It should be given to every student entering College, and you would look out for four things.

(1) For defects of posture. The protruding chin, the depressed chest, the protruding abdomen, and that general slackness which is usually a physical indication of the mental state of the student; also fallen arches and the shuffling gait which are characteristic of the flat-footed individual whose whole ligamentous system is usually relaxed.

(2) The heart. A man depends on the efficiency of his heart, and there are two dangers. If it is defective, there is danger in carrying on strong active athletic competition; the heart may

become more and more seriously damaged, and his life may be threatened or early invalidism may be brought on. At the other end of the scale is the danger that he may be prevented from going in for any form of exercise at all where light and carefully supervised exercises may be of the utmost value both physically and mentally. Those who had experience during the War of the diseases and disorders of the heart know how quickly some of those men recovered under carefully supervised exercise.

(3) The lungs. Many a student comes to College with the incipient symptoms of tuberculosis or on the border-line of it, and, undertaking a very heavy course, he may do one of two things. He may take on too much work so as to run himself down, or he may engage in heavy athletic sports under the impression that it will do him good, and in this way will still further accelerate the progress of the disease.

(4) The special senses. He should be able to see well with or without glasses; to hear well; to have no focus of infection in his teeth and throat which would undermine his constitution.

This stocktaking of the student's physical equipment is the first thing to be done if the University is to assume the responsibility I have spoken of.

We find that in an examination of that kind the men fall into three classes:

- (1) Markedly defective.
- (2) What may be called the normal student with no special defects and no special physical ambitions.
- (3) Athletic men who come to College sometimes primarily because they want to play football, cricket, or row.

Roughly, they may be classed as 20 per cent. of defectives, 60-70 per cent. normal, and 10-20 per cent. of athletically inclined students.

If we have a progressive programme of physical supervision of the students, what shall we do for the defectives? First of all they must be required to do what they can to remedy those defects which are remediable. They should be given special exercises to bring out the chest and to develop the structures which have to do with posture. We find an extraordinary change in the outlook of the man who, after a course of special setting-up drill exercises, remodels his whole posture. He acquires a new outlook on life. He goes about with his head up instead of down, he stands up with his chest out, ready to face the world. This was markedly seen during the recruiting of

Kitchener's Army in 1915. It was dramatic to see the slovenly, careless recruit change into the erect, deep-chested soldier during the course of training.

Men who have some defect of the heart must be given warning which should be enforced to prevent them from taking part in violent athletics, because, even with a serious defect of the heart, a young man with the resilience of youth may be able to put up quite a good show with a badly damaged heart, only to find the effects come on in early middle life. The exercises which are suitable for him must be prescribed and limited. It is our custom to have these men report once a month, so that we may follow their course and condition. In the same way those who are under weight, who have a tendency to or show the first symptoms of tuberculosis and who would speedily go downhill if overworked, physically or mentally, must be warned and kept under supervision. It is our custom to have them report week by week, bringing a record of their weight.

The faults of the senses, of course, must be taken care of in other ways.

What is to be done with the normal student? The normal student is at the present time neglected in all Universities where there is no requirement in physical education. He occupies the benches at games, but gets little or no exercise for himself. If left to himself he will take comparatively little exercise of a systematic character, particularly if he has a hard course, because he feels he cannot spare the time from his academic work. It is for this great mass of students that there should be a systematic course of physical education.

Physical education is a term which has been very vaguely used—it has been more misused than used. I have frequently had the experience, when introduced as a Professor of Physical Education, to see a puzzled look come over the hearer's face, and then almost always he will square off like a boxer or take up some other attitude which reveals his idea of what physical education is. Few of us realize that physical education is a wider question than the teaching of great efficiency in any one particular form of sport. Very often a man who has won his "blue" may be badly educated physically except in his speciality, just as it is quite possible for a person to be accomplished in a certain special science, and remain quite ignorant in many important fields of knowledge.

What, then, should you do for these men? Give them a progressive course in which you systematically cover the various forms of activity which have been fundamental to mankind

from the beginning of time: the great fighting co-ordinations, the ability to strike a straight blow with the fist, to extend the arm by means of the sword or the single-stick, the ability to extend it even further by the use of balls—all the ball games, such as fives, tennis, cricket, baseball, basketball, football, which teach as nothing else can teach quickness of the eye, judgment of distances, of weight and of speed, which can be learnt in no other way, and which everyone should learn. Such a course should teach the different forms of locomotion, not only running and climbing, but swimming—particularly swimming. It does not matter how much knowledge you may have if you find yourself beyond your depth, unless you have the particular co-ordinations, simple as they are, required for keeping yourself afloat.

A course can be designed, starting with simple exercises and going on to complicated ones. Many of these can be taught through the natural games worked out by the students themselves. Many of them cannot be taught that way but must be analyzed and taught by gymnastic games, or exercises. I do not believe that there is any sharp line of demarcation between gymnastics and athletics. They go insensibly from one to the other. It is a question of motive. A man starts with a gymnastic exercise, and when he has learned it he applies it to some form of game.

Another thing he must learn in any course on physical education, and that is the spirit of co-operation which is carried out only in team games, and this can be taught only through team games. We must have classes and gymnastic games, because it is impossible to provide space or time for the large number of students who have to be given exercise in a short time if we have to deal with the whole mass of the students.

The third class, the athletes, now come into question. As a matter of fact, the student who is a great athlete is often more or less a genius. His mind is obsessed with ideas relating to speed, time, distance, and endurance, and he unconsciously gives them the intensity of study that is allied to genius, which has been described as the infinite capacity for taking pains. They will be comparatively few in number. I do not think that 10 per cent. is too high a percentage to give of men who are enthusiastically engaged in some form of violent athletic sport. It is a curious thing, however, that when one has a complete course of physical education for the entire student body, including the defectives, the normal students, and the athletes, you get a constant interchange from one class to the other.

The defective corrects his defect and goes into the regular class-work games, and sometimes discovers unusual ability which he did not know about and becomes an athlete.

There should be just as much care exercised in the supervision of the athlete as the defectives. Provision should be made for the carrying on of all possible sports in their season; they should be encouraged in every possible way. The men should be examined before they go in for them to see that they are in sound physical condition. The social side of them should be left to themselves, but the amount of competition and the time devoted to them should be supervised and provided for.

We cannot require students to take exercises, whether it is in the form of corrective work, of a gymnastic class, a class game, or an intercollegiate competition, unless we provide the time and give them credit for it. I believe that credit should be given very much on the same basis as it is for academic work. This may seem a radical statement, but it is a thing which can be done and which has been done and is being done satisfactorily in a great many leading Colleges and Universities in Canada and the United States at least.

Let me give you an example of the way in which credit can be given. It may be given for attendance. It may be given for progress. A man who starts, for example, as a defective will get his credit for attendance. He may take up swimming as his form of exercise, because wide election should be allowed in the form of exercise students may wish to take; he learns to swim during the winter, to dive from a ten-foot platform, to pick up objects under water, to take the various life-saving exercises, and at the end of that time he is well educated physically in the water. He may not be a champion swimmer, but he is versatile and well educated in that form of exercise. There is no reason why he should not get credit for that just as he gets credit for accomplishment in Mathematics or Astronomy.

There should be penalties involved for neglect of this work. In many cases men have had their degree withheld for neglect of the physical requirements of the College. We have often had students coming back to take an extra term to complete their units of credit in physical education.

What are the results of this? First, that every student comes to realize that the physical side is part of the general educational scheme of the College. He gets an idea of the possibilities for his own physical development, of the possibilities both social and mental of the athletic side of his life, and, when he goes out and becomes associated with school boards

and such like in the town or village in which he may live, his advice is of great value in the organization of the playgrounds, and in the physical education in the schools, because, after all, the College is too late a time at which to start the physical education of youth. It should start with the beginning of his school life. We have special courses for the training of teachers in physical education in the College curriculum, so that the whole question may be understood, studied, and appreciated by those who take these courses.

In the limited time at my disposal I have been able to give only headings of some of the questions which are involved in this discussion, but I hope many of these headings may be developed more fully and completely than I could do by those who follow me.

VICE-CHANCELLOR ADAMI (Liverpool): I realize very fully the importance of this afternoon's discussion, not from the point of view of what is said by the representatives of British Universities, but from the unique opportunity afforded to-day for us to hear what is being done in the Universities of the Dominions and by the other branches of the Anglo-Saxon race. It has been a great pleasure to have Dr Tait Mackenzie to open this debate, he being the leader in this movement in the United States. You may remember that Dr Tait Mackenzie is a Canadian, and began his work at the McGill University as Professor of Anatomy, and then he became Director of Physical Education, so that he comes within the purview of the Universities of the Empire.

Really I feel that I ought to apologize to you for appearing this afternoon in so prominent a position. I owe it to the fact that a few months ago I brought up this matter of physical education in the British Universities at the Annual Conference of the Universities of Great Britain and Ireland, when, as you may have gathered, there was some objection to my remarks. I want you to realize that I am personally no faddist, no extremist. I think it was Mr Joseph Chamberlain, at the height of his power, who remarked: "There are two ways of keeping well. Either exercise regularly, or take absolutely no exercise at all. There is no way between." On looking back on my own career, I realize that, provided a man has been gifted by his parents and therefore by inheritance with a sound constitution, with hard firm teeth, a good digestion, an excellent circulation and a good chest, and has been brought up in his boyhood in a country garden, has then gone to a good school

where he had regular exercise, and to a University like Cambridge where his first two years were devoted to exercise, that man may, as in my own case, do absolutely without exercise for the rest of his life. From the time I was thirty onwards I was so much engaged in my laboratory that I took no exercise, and am an example of the result.

But there is, of course, a Nemesis. Joseph Chamberlain, only a year or two after making that remark, prematurely broke down, and possibly I had last year a somewhat similar experience. So here I stand, not one who regards this matter of exercise as essential after maturity is reached, although I do regard it as wiser to take exercise than to attempt to do without it.

Notwithstanding my abstention from exercise I found, when I went into the War at the ripe age of fifty-two, that, of the thirty officers of my unit, I had the biggest fighting capacity and the best power of restoration. I was never absent from my work (it was largely stationary during the whole course of the War). I was, as I always have been, healthy.

When I came to be appointed Vice-Chancellor of Liverpool I was impressed by the fact that, whereas the main body of the University students had clear complexions—bright Lancashire lads and lasses—there was altogether too great a number of students who lacked lustre in the eye, who held themselves as Professor Tait Mackenzie has described, in a wretched posture with the chest in and the chin out. They had (I speak as a medical man) the constipated complexion and the custard face. We all know you cannot be constipated in body without being constipated in mind; you cannot be anæmic in body and not be anæmic in mind. There was too large a number of men and women who were unhealthy and whose minds, in consequence, must have been unhealthy. So I got together the captains of our athletic clubs and made a census, with the result that we found that out of 2000 students only some 350, who were either in their teams or in the O.T.C., were taking regular forms of exercise. All the rest were lowering their mental vitality by taking no healthy amount of exercise. I became convinced that this must be stopped; that we of the University were not doing our duty. The ideal of a University in the Middle Ages, it is true, was the ideal of the Church, which was in the main that to keep men good the body must be kept in a condition of abstinence; whereas we now know that the saner ideal is to control the body and to keep it under governance by training. The ideal of the mediæval University was taken from the Church. It was a place where the development of the mind

was alone to be considered and the development of the body was to be neglected. At the time of the Renaissance, whereas we largely took up the Greek ideal, owing to innate conservatism, we forgot that the complete ideal of the Greeks was that education was the co-ordination of body and mind. We have to adopt this ideal and to realize that our duty as Universities is to develop the rounded, complete man and woman.

But how are we to do this? We cannot provide exercise-grounds and playing-fields for 2000 students. That is impossible. It is very difficult indeed for us to provide an adequate gymnasium for physical exercises and Swedish drill. But certainly a first start should be made, here in Great Britain in our Universities, by medical inspection. We should start with the man who has been found to have a remedial disease or defect which can be put right by wise advice from a medical man. I am glad that we have representatives here from the Dominion Universities who can tell us from their experience what this has meant for the improved mental condition of their students. For I would have it hammered in and repeated to everyone that to have a healthy mind, an alert mind, one must have a healthy and alert body. There is one exception. There is that group of great geniuses—Keats, Chopin, Chatterton and the like—who died from early tuberculosis. Undoubtedly chronic tuberculosis, by raising the temperature each day 1° or $\frac{1}{2}^{\circ}$, does raise the brain to increased activity. But these were not examples of virile men who gave us manly lessons. Notwithstanding their undoubted genius there was a certain weakness in the lessons that they taught. We must have healthy bodies if we are to have healthy minds. It is our duty, in our modern civic Universities, to take this subject up. Really the fault lies mainly with our suburban and secondary schools; they have not copied the public schools in these matters. They send their boys and girls up to the Universities without a proper healthy ideal of physically fit lives, and it is to them that we owe a great deal of the unhealthy condition of our students in the modern Universities. We have done much in our primary schools and must do much in our secondary schools to see that the necessary place is taken by physical training. It is now up to the Universities to take the lead in this matter and to establish a compulsory medical examination of all their students, and to advise them what line to take in order to cure any defects from which they may suffer. Secondly, we must provide a gymnasium and hall where physical drill can be carried on, and

must help the athletic teams of the University to choose and train the right men.

CAPTAIN C. LAMB (Montreal): The primary idea in asking me to come here was to say something about the actual physical and athletic activities which go on in Canada. So I shall start by quickly running over some of the more interesting and important things connected with them. Fortunately you have in your hands a printed account of the activities of Toronto and also a very exhaustive list from McGill, so I need not say much of those two Universities; but you will gather that their work is compulsory for the first two years, and that, if the students fail to put in the requisite number of attendances, they are penalised later on.

At McGill they have in connexion with the University a first-rate school for training teachers in Physical Education. After a two years' course they gain a diploma and are able to go out and give what we think is the right sort of teaching in the elementary and secondary schools throughout Quebec and all Canada. When I knew I was coming here I sought an opportunity to go to Harvard to try to gain a little more information, and eventually I was invited to spend a few days there.

In Harvard they go in for the subject on a very gigantic scale. The work is obligatory for the first year only, but that means quite a big undertaking because the annual influx is 1000 freshmen. Students are graded into Classes—A, B, C, and D. As Dr Tait Mackenzie has explained, this is a very necessary thing. There is no doubt that, if physical training and athletics are to be prescribed, medical inspection is absolutely necessary. Without it harm would be likely to be done. The D's are the people with the worst physique. They are very thoroughly cared for. A silhouette is shown to the student in order that he may see for himself what sort of a figure he has. He thinks, "If I am like that, I had better do my best to change myself quickly." The professor who deals with these students finds that they take great interest in the subject. Every student at Harvard must swim or pass a swimming test before he can graduate; and, in passing, I might say that the swimming-tank where they learn to swim is not much bigger than a decent-sized cistern, but it answers its purpose. From it they go on to the river.

Athletics are going very strongly there. The day I visited the stadium there were at least 400 students out, busy on different things—a daily occurrence during the term. I noticed very

markedly the posture of these young fellows. They were all well set up and carried their chests well. There is a big difference between English students and those in Canada and America so far as I have seen. For three years I was at St Andrews where, although they took a lot of open-air exercise, the students were less well built—at least they held themselves badly, and there is no doubt that if a fellow does not look after his chest and give it a chance to do its normal job, he is liable to get into trouble.

I do not know if all the Universities in Canada have compulsory training. I think Queens has not anything definite, but I have not got into touch with all the Universities. I am not attached to a University, but to an amateur association in Montreal to which 700 students come for physical exercise. Their ages are from eight to well over sixty. I have several grandmothers and grandfathers who come for physical training, but it is necessary to say that the long winter compels them to keep indoors and the central heating system makes the air bad, and so they find that physical training is necessary. There is no doubt that the necessity is greater there than here. Here you quite often get a game of golf at Christmas, but not in Canada. In a Canadian winter one cannot stay out for any length of time except for ski-ing or other winter sports. •

To pass on to what might be done here. I do not think our Chairman meant, when he said that physical training and athletics are relatively subordinate to the main purpose of the University, that there should not be physical training and athletics. He meant, I think, that we must not have an elaborate organization costing a great deal of money and possibly rather a matter of show. That is not the game at all. If I make a few suggestions, I do so merely with the desire of helping to get the thing going better than it is now.

First about the medical examination. No one would be wise to undertake physical exercises or athletics without that. It is essential. After that, start in a very simple and mild way, cut out apparatus as much as you can. We do not need much apparatus. Get the man going; get his blood flowing quickly through his veins; get him breathing well and understanding that he should not look on physical exercise as something he can take up for a year and then leave alone, but something he must make a point of doing all his life. He can do it in his bedroom, or, if he has opportunities for outdoor exercise, he can do it out of doors if he prefers. We must aim at something simple and easily carried out. It seems to me to be the duty

of every University to provide facilities for students getting exercise. I think too that a central school, where candidates for instructorships could come for a short refresher course, should be organized. For all teachers in Physical Education, whether in Universities or in schools, a central school for a refresher course would be a great help.

The army and naval instructors are, as far as I can gather, the best all-round trained people. No doubt they are able to turn out a 6-foot high-jumper. We do not want to turn out experts; the expert will turn out himself; we want to get every man to understand that he will not do his best mentally if he is not physically fit.

Last of all, I might suggest a way of getting more people to take part in athletics. Soon after the War the army brought in the system of standard medals. If a man passed the standard test he got a medal. That might be introduced. A man may abstain from entering for a competition because he knows that he is sure to come up against someone better than himself; but if he knew that if he did his 5 feet in a high jump he would get a medal, he might feel satisfied.

In conclusion, I would say that I deem it a great honour to have been asked to speak here and to have had an opportunity of urging speedy action in this matter. There is no doubt that the person who is of most use to the community and to the State is the man who has given judicious attention to his own physical as well as mental training.

PRINCIPAL GRANT ROBERTSON (Birmingham): I am disposed to apologize for speaking at all, when you might be having in my place another representative from the Universities of the Dominions explaining what they are doing in this matter and the results they have already achieved. But I approach this question from two points of view. In the first place, from that, frankly, of a civic University. I need not repeat the reasons which Dr Adami advanced why this question of physical welfare and training appeals particularly to those who are concerned with our civic Universities, and I should like to endorse all he said on this subject.

Secondly, I am very anxious that we should, as Universities, *affirm the principle*, which we have not yet fully accepted as a University principle, that those of us who are responsible for running Universities—the Council, the Senate, the staff—are responsible quite as much for the physical welfare of our students as for their intellectual or moral welfare. We want to get that

principle accepted as one which is no longer in dispute and which is, for that reason, indisputable.

Quite frankly, I do not think—at any rate in the civic Universities—that we are at all prepared or ripe for that elaborate system of organization worked out in some of the Dominions overseas and in the American Universities. I saw in the United States many of the results of their medical preventive work, which were very impressive. I only wish we were ripe for something like that, or that we had the financial or material resources for doing it. If I suggested anything of that kind in Birmingham I should meet with opposition from two sources. First, from the Council, who would say that they had not got the money; secondly, from the students, who would say that they did not want to be organized in that way.

I was glad to hear the previous speaker recommend us to go for one thing, and one thing only, to commence with; and that is what I am going for in Birmingham—compulsory medical examination of every student as a condition of entry into the University, and as essential as matriculation or any other recognized method by which you accept a student as fit to undertake a University course. I was led to that conclusion by the results in our Education Department in the University of Birmingham. Of 1800 students, about 400 are in the Education Department—200 women and 200 men. They are known as Government Grant-earning Students, and they work under certain conditions imposed by the Board of Education, even when they have a degree, before they can go out as qualified teachers. One of those conditions is a medical examination. When I studied the statistics of the Department I saw at once, particularly amongst the women, the need for a compulsory medical examination before being admitted to the Education Department, and the repetition of that examination at least twice in a four years' course, together with a final examination in which certain tests have to be passed before obtaining a licence to teach. The regulations as to medical examination and report have conferred inestimable benefit upon those 400 students. A great deal of sickness has been prevented and a great deal of good health created. I asked myself this question: "Can you not apply something as simple as that in the case of all students?" That is what I am asking my University to do. So far, I have got my Senate to accept and recommend it to the Council. I have not yet succeeded in persuading my Council to accept the proposal. But I shall go on pressing it until I succeed.

What does the opposition come to? I leave out the objection with which we are all familiar in England—possibly in Scotland—that because it is new it is not desirable. But, leaving that out, I find that criticism comes from three points of view, or, rather, from three different lines of approach.

There is, of course, always—though perhaps this does not apply to the Dominions overseas, or to the Scottish Universities (of which I have not a working knowledge), and it may not apply to Oxford and Cambridge, or London, or Wales, but it does to the provincial Universities—money! “What is it to cost? Shall it be borne by the University or the student? Will you insist on medical examination and make the student pay for it, or make the University pay?” We have worked out that it will cost 10s. to £1 per student, and on 1800 students that makes £1000; and my Council is kicking at that £1000. I believe it would be a good investment. I believe the student might pay part and the University part, and I think the students would not themselves object to such a regulation. And once the system was working it would be accepted as a normal element of the cost of a University education.

Secondly, there is the medical faculty. The medical faculty of my University jumped at the proposal when I brought it up in the *Senâte*. Then they quoted statistics and got forms of certificates from all over the world, and worked out a document which would have terrified any student or parent and would absolutely have terrified myself as Principal. They said it did not mean all that it looked. But we wanted something that looked what it meant. For the medical faculty were not after the same object as I was. They said (to themselves): “Here is a glorious opportunity of creating a Ministry of Health inside the University in which you will get vital statistics, huge card indexes, and so on.” That was what they were after. We said we did not want that, but only a rough-and-ready medical examination which would indicate to a student if he had some remediable evil or defect; and, if the examination revealed signs of more serious disease, then the student must be referred to his own doctor for a searching examination. What we want is a preventive insurance which will lead to valuable advice being given which the student will be more or less free to follow, while he will be told that if he does not follow it the consequences of neglect will be paid by him—and not in money.

The third objection brought up is this. The student says: “Are you going to utilize this certificate as a reason for excluding me from the University? If I take this preliminary

medical examination, and, if I am not considered satisfactory from the point of view of the doctor, but on my other intellectual or moral credentials am good, will you turn me out or refuse to take me in?" We do not intend to use the examination as a reason for exclusion. If the intellectual and moral credentials are such as permit of entrance, but the health certificate is so unsatisfactory as to result in students being sent back to their own doctor, it is for their parents or themselves to decide after the doctor has reported whether they are fit to undertake a University course. But if it is as it generally will be, simply a case of remediable defects, the student will be given advice which will enable him to do his work in the University a great deal better than he would otherwise have done.

There are two further points. First, we have found already that a number of the women students and some of the men are now asking if they could be admitted (they are not in the Education Department) to the Education Department physical training courses, because they have seen from their fellow-students what such physical training is doing for them; and we have begun to organize voluntary courses in physical training; but we cannot find adequate accommodation and instruction for them, even though the students themselves are prepared to pay and want these courses.

That brings me to my final point. I believe, and I commend it to the consideration of the audience, that the really great reason why we want to start in this modest way and get this particular form of preliminary medical examination is that it will lead inevitably and in a very short time, not to the compulsory organization of games—much as I believe in games, I do not believe in their compulsory organization—but to the University seeing that an advisory and preliminary medical examination is a part of legitimate University expenditure, as legitimate as spending University money on laboratories for physics or a library for the Faculty of Arts. The University will then be obliged to provide more and better facilities for physical education and training, both curative and preventive, for the students, and will regard such provision as an essential function of University expenditure and duty. We have prepared a form of certificate based on the form for entrance to the Girls' College at Cheltenham. It is very simple and, if we can only get that working, in two or three years' time we shall, I am quite sure, be providing for our urban population the means for physical education and training in our University on a scale which we are not doing at present. I believe our failure to do

that so far is a dereliction of duty, and I am quite certain that if what I have advocated is introduced it will enormously increase both the quality and quantity of intellectual output in the work of our students.

PROFESSOR SIMPSON (McGill): The conception of education as including physical as well as intellectual and moral development of the student is so ingrained with me that I am afraid I did not realize that there might be some necessity of forcing the idea home. The thesis to which I would like to confine my few remarks is based upon experience gained in a University where the health, the physical training, and competitive athletics of the student body are regarded as properly coming within its jurisdiction and control. That point of view is adopted by most of the Canadian Universities and, although the details of administration differ in different Universities, the general plan is much the same in all. In some of them the scheme has not progressed as far as in others, but the general plan is the same.

I would like to emphasize one or two points in connexion with each of the three phases of this question.

1. The question of health and physical welfare. The compulsory medical examination on entrance to the University is with us completed after a student has matriculated. There is, therefore, no feeling on the part of the student that he may be kept out of the University because he is unfit. It must be undergone and completed within one month of his matriculation, and, if he does not within that one month submit himself for medical examination, his name is removed from the register of the University.

This compulsory medical examination on entrance is carried out very thoroughly. The men are categorized into five sections, from (a), men who are fit for any form of athletic exercise, to (e), those who are unfit for any form of exercise at all. Last year 80 per cent. of the men students were in Category (a), about 2 per cent. or a little less of all students were in Category (e). As far as the students who are placed in Category (a) are concerned, there is little to be said. These are the men who might have been admitted without medical examination; but it is the 20 per cent. of students who are below Category (a), or perhaps the 8 per cent. below Category (b), students who are fit to take part in gymnastic exercises and in a limited number of athletic sports, for whose benefit the examination really is conducted. By a careful examination defects are noted and

remedial measures are advised. We are absolutely certain that a great improvement in the health of these individuals is brought about, and not only improvement in health, but in the character of their work generally. These men are re-examined at intervals during the session and their category may be raised at the proper time.

We believe that the compulsory examination on entrance is not the only thing in regard to the welfare of the student. We go further; in many Universities there is now an organized health service. A health service means that there is a University medical officer, who may be consulted at regular hours within the University buildings and who will give medical advice and prescribe for the students. As to the cost, that is easily met. The students willingly agree to pay a fee of \$2 per annum for medical service, and in return for that fee they are free to consult the medical officer whenever they will, or, if they are too ill to go to his office, he visits them in their homes. They are also entitled, when he decides it to be necessary, to hospital attendance for seven days. The reason for this limit of seven days is that the majority of hospital cases are cured in that time; if they are not, an opportunity is provided for making the necessary arrangements for longer treatment. That is quite adequately met by the fee.

With regard to physical training, I am sure that there is much greater fear of the word "compulsory" than is justified. We had the same fear of compulsion, but we found as a matter of fact that our fear was not justified. There was some opposition at first, but it died out within a year. We found that the great secret of success was to give the student a wide range of choice. We advised him as to the forms of exercise he might take. There is a wide choice of (a) sports or other forms of exercise. It is only the student who prefers the gymnastic work or who does not specially prefer any other sort of exercise who is compelled to work in the gymnasium. The reason is partly economical—it is not that we do not believe in systematic training in the gymnasium, but our gymnasium facilities are very inadequate at the present time.

To pass on to the last point, the organization of athletics with a view to obtaining a wider participation, it seems to me that this point is not so pressing in Great Britain; but, if it is to be successful, at least three things are necessary.

1. The whole scheme must be under University control. Athletics with us have a tendency to pass either into the hands of the students or into the hands of the graduates. Of these

two the latter is the more disastrous, but we have found that when the control of competitive athletics is under a committee or body with a small student and small graduate representation, and the balance of power in the hands of the Faculty, things run better and smoother.

2. It is absolutely necessary to have academic recognition of physical training and organized athletic sports. You must have, it seems to me, these matters under the direction of a department which is on the same footing as the academic departments. To be successful it should be under the direction of a man who is professorially ranked among the members of the department, and appointed by the same authority which appoints the other members of the staff.

3. It is absolutely necessary that the University should find the time for athletics and sports.

MR ADAMSON (Melbourne): We now come to something which is quite different from anything that has been referred to up to the present. The case of the Australian Universities is entirely different from that of Universities in the other Dominions because we have compulsory military training there, and, under the law, all our students have to go through a regular course of physical training.

What happens is this (taking the Melbourne University): Wednesday afternoon is left free for drill and physical training. A fortnight's camp is also held for all University students who are above the age of eighteen. If under the age of eighteen, they belong to the senior cadets. A boy in Australia has first of all a medical examination before he becomes a junior cadet, another more strict examination before becoming a senior cadet, and a third examination before becoming a member of the Citizen Forces. The physical training, therefore, is carried out under the law. I should say that compulsion is absolutely abhorrent to all Australians, but they do not mind it if it is the law of the land, but only if it is the law of the land, and I cannot picture any Australian University introducing a system of compulsion, if it were necessary. After listening to all that has been said this afternoon, it seems to me that we approximate to the habits of the older Universities because, though I do not think Australia can be accused of being lacking in athletic forms or practice, it is left to the students to organize their own athletic sports. They have their various clubs, which are financed by the subscription which, in the University of Melbourne, is paid by the student. There is a Sports Union under

the University of Melbourne which pays out the money to the various clubs.

Here I would like to say that I am in accord with the remarks of the Chairman in his opening speech. I think there is a danger of increasing the rounds of inter-University matches and competitions. I should be very sorry to see competitions between Universities reach the life-and-death fierceness of a football match between Harvard and Yale. In Australia our distances are very great, but the whole of the six Universities do row together in the different capitals, and cricket and football matches are arranged. The distances prevent anything more. But these matches are not played with any great fierceness, and I am happy to say that the ethics of the game is still the prevailing point. Not long ago we were told that, if England wants to win, she must cut out the sportsman dope. I hope it will be a long time before England or Australia cut out the sportsman dope. The whole ethics of the game in our Universities is fostered by what happens in our public schools, where that feeling is nurtured to the utmost and has taken real hold.

I was prepared to find that something more would have been said about sports competitions. I was rather shocked by Dr Mackenzie, who said people who did not play games smoke and bet on the teams. I have never heard of anyone betting on the teams in Australia, though we are a gambling community; I do not think University competitions have been made a medium for any kind of betting. In Australia there are at least 10 per cent. who are really game enthusiasts. Statistics are funny things to meddle with, but I am sure it is a higher percentage than this.

What Dr Adami said also impressed me, that the secondary schools are sending students to the Universities without proper training in athletics owing to their circumstances, and too often with a defective physique. Speaking as one who only comes back at intervals to the old country, what has struck me most in the school education is the fact that the secondary schools are so actively in process of assimilating the ideals of the public schools that they are growing more and more like them. In another five years there will be a vast increase in the organization of games in the secondary schools, with the true ethics of the game understood.

Dr Lamb mentioned one difficulty in Canada which we do not experience in Australia; he said that physical culture classes are popular because of the long winter evenings which keep people indoors, and of the central heating which does not improve the

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atmosphere. It is quite different in Australia. There is scarcely a night in the year that the young do not go out of doors. We take our amusements, our athletics, and exercise much more in out-of-door games than would be possible in a colder country.

DEAN SHENNAN (Aberdeen): It might perhaps be useful to tell you what we have done in Aberdeen. The trouble comes with the winter months when darkness sets in between two and three in the afternoon. In former years athletics has had to be indulged in on Saturday afternoons chiefly, but four years ago we made an arrangement by which on Wednesday half the day was given up, not to "athletics," but to "recreation which must be taken in the open air." That is the way we put it. And the proposal was made in that form to the Students' Representative Council who were asked to report on the result. That has been kept up for four years and, I think, with a certain measure of success, and more of the men and women are taking advantage of the opportunity for recreation and athletics than formerly. I would point out that our student population is not drawn from public schools to any extent, so that very few of them have had any previous training in athletics, and we have aimed more at *encouraging* them to go in for exercise and athletics than at *compelling* them to do so; because our students do not care to be compelled to do anything, even if it is good for themselves.

Another element which has not been touched on to-day, and which I think is important in this connexion, is the way in which the members of the teaching staff regard this form of training. If members of the teaching staff take an interest and show it, then the men respond. It is extraordinary how responsive students are to interest taken in this way. Over and over again I have got more men to turn out for a contest by speaking to my class and putting the Varsity spirit before them.

With regard to medical inspection of students, we have rather held off that for the present. We get our students from a school population which has been under fairly strict supervision between the ages of five to fifteen or sixteen, and their general health is looked after as well as it can be in such a large school population; their eyes and teeth have been seen to. So we thought we could let that go for a little as not being so important, and the Medical Faculty, on discussing it, decided against compulsory medical examination. Now a medical man is going to be appointed, a member of the teaching staff of the medical

school, who will be available for students who wish for advice. In former years two of our medical staff have always been available, though not officially, and students have constantly gone to them; but now it will be made official.

With regard to *instruction* in physical culture, we discussed the question as to whether this ought to be carried out under a medical man, and we came to the conclusion that it was not advisable, even though such an individual should be available. Hence, in addition to this medical man who is appointed to look after the interests of the students from a health point of view, we are now appointing an instructor in physical culture, who preferably will be an old army or naval instructor, and, to assist him with the women students (who, I am sorry to say, have not responded to the invitation to take up recreation as the men have done), a woman assistant instructor will also be appointed.

THE CHAIRMAN: May I point out that no one, in the course of the discussion, has cleared up the point whether we are to insist on compulsory athletics or compulsory physical training. We all agree that physical health is essential; it is a commonplace in all Universities. And there is much to be said for the argument that students who are going in for a hard intellectual training should have a good start physically. But the question we are considering only begins when we talk of compulsion. It was put forward, I gather, as a serious proposition by Principal Grant Robertson that they will take steps in Birmingham to carry through compulsory medical examination of the health of the students preparatory to entering the University.

PROFESSOR GRANT ROBERTSON: That is the proposal; it is not yet carried through.

THE CHAIRMAN: But there is this difficulty. I do not know the regulations or statutes of Birmingham, but in any other University I know it would be impossible to insist on students undergoing such a compulsory examination preparatory to entering the University. That is admitted by Principal Grant Robertson when he says it is not proposed to make that conditional on whether the student shall or shall not enter. There you are faced with a legal difficulty. The University does not exist to ensure adequate physical training or health; it exists primarily for the purpose—call it mediæval if you like—of training the intellect in the pathway of truth; everything else is subordinate. That being so, I do not see how you can lay down

as a condition of entering or pursuing courses of study, or as in any way affecting the career of the student, that he or she shall satisfactorily pass a physical medical inspection. The line of action pursued by Aberdeen seems to be what is required—to appoint certain individuals on the staff to whom the students of the University can go if they require to do so. But everything else in this matter must be left to the decision of the parent and of the student. What seems essential is that the individual in a University should be as physically well as possible and take such means as are at his disposal for securing physical health, and that the University should spend as much as possible in giving all the facilities which would be necessary for the students to keep themselves in health. There the responsibility of the University ceases; the rest lies with the students.

PHYSICAL TRAINING AND THE ORGANIZATION OF ATHLETICS IN THE UNIVERSITY OF TORONTO.

Report.

I. PHYSICAL TRAINING AND HEALTH SERVICE.—The University Health Service, which aims at the promotion of health and physical fitness among the students, has now been in operation for five years. As physical training is now compulsory for the first- and second-year students, they first receive a physical examination which properly classifies them for the work, so that they may take the form and amount of exercise best suited to their needs. Those athletes who are on University or College Teams are allowed their attendance in physical training while playing their respective games. In the event of injury or illness the University physician grants them exemption. Any student may elect to take the work in the Officers' Training Corps in place of gymnasium work, if he should so prefer. In 1925-26 the University of Toronto contingent of the O.T.C. mustered 315.

All students are taught to swim, and many take lessons in life-saving. Two hundred and seventeen men received the Royal Life Saving Award in 1924-25.

Examinations.—A staff of physicians, chosen by the Professor of Medicine, examines the students of the first two years, and the applicants for all athletic teams. A staff of specialists also re-examine those referred to them for this purpose.

The average results prove that about 98 per cent. of these students are able to take physical training. We find that there are (1) physically fit and able to take all gymnasium work, 93 per cent.; (2) men with some disability requiring supervised exercise, 5 per cent.; (3) physically unfit (some temporarily and a few permanently) and exempt from all gymnasium work, 2 per cent.

Classification.—A1: Students who are physically fit. These may take heavy exercise and any form of athletics. A2: Physically fit, but, owing to light weight, under-development, or similar cause, may take light exercises, but should be instructed what games to play.

B1: Students with some defect remediable or otherwise. These must take light exercise and remedial gymnastics. B2: Students with some disability, and temporarily unfit for any exercise.

C: Students with some disability not remediable. These are exempt from all gymnasium work.

It has been found also that there are many defects among the students, the great majority of which cannot be corrected by gymnasium work, but require medical treatment. Students with such defects receive advice pointing out where necessary the desirability of proper treatment.

Venereal Diseases.—No case of syphilis has been found in our examinations of the first two years of the student body. As for other venereal diseases (gonorrhœa), while doubtless here and there cases have occurred, only two cases of this disease have appeared during our examinations. When it is realised that the examinations are compulsory, that everyone appears stripped before the examiners, and that these examinations are all completed in a period of four or five weeks' time, it is evident that we have a remarkable freedom from venereal diseases in our University.

Athletics.—Medical examinations have been given to all members of athletic teams and other athletes, and in a few cases we have prevented students from taking part in athletics and games and gymnasium work, owing to weak hearts or other conditions which would make participation harmful.

Advice.—While assuming no responsibility for treatment of those who are ill, we give advice to a large number, and make it our duty to urge proper medical care where needed. A large number of minor injuries, received in the gymnasium or on the campus, are attended to during the year.

Lectures on personal health are given to the first- and second-year students in all faculties.

The co-operation of the staff from the different Faculties, the students, and the Athletic Directorate in the work of the University Health Service has been most encouraging.

II. ATHLETICS.—*Control.*—University athletics for men are under the entire control of the University Athletic Association, of which the executive body is the Athletic Directorate. This consists of: The President of the University; two members of the Faculty, appointed by the President; two graduates, appointed by the Athletic Advisory Board (Graduates); the Medical Director and the Financial Secretary (*ex officio*); five undergraduates, elected annually; an undergraduate representative, appointed by the Students' Administrative Council.

The Athletic Directorate alone has the power to sanction the use of the name "The University of Toronto" in connection with men's athletics, and no men's athletic event can be held

in the University without its approval. It has control of the athletic field, the gymnasium, the swimming-pool, and other conveniences in connection with athletics, and is empowered by the Board of Governors to make the necessary arrangements to effect the carrying out of the University regulations requiring Physical Training for men.

Practice.—There are two grades of Athletics: (1) Intercollegiate, in which the University teams compete with other Canadian Universities; and (2) Interfaculty or Intermural, in which teams from the several faculties and affiliated colleges compete annually in a series of competitions in the respective sports. The following branches of athletics are represented: Rugby Football (Canadian); Association Football; English Rugby Football; Track and Field; Tennis; Harrier (Cross-Country Running); Hockey (Ice); Basketball; Boxing, Wrestling, and Fencing; Swimming and Diving; Water Polo; Rowing; Gymnasium Apparatus; Indoor Track and Indoor Baseball. On account of the long summer vacation, it has not been found possible to include Cricket, Lacrosse, and Baseball, which are essentially summer games, in our scheme of University Athletics. At present there is no Intercollegiate competition in Rowing, but three or four University of Toronto crews train each year and enter regattas in the summer with other crews. Training commences in January on the indoor machines and is transferred to the open water by about the middle of April.

The first- and second-year students who are physically fit may elect to play in some form of competitive athletics during the season that that particular sport is in progress. Their attendance is reported by the managers of their respective teams to the Athletic Office each week, and is entered on the Physical Training attendance sheets.

For all other students in the first and second years, except those enrolled in the O.T.C., twenty-two gymnasium classes a week are held during the University terms, each student being required to attend twice in each week and to make at least an 80 per cent. attendance. In favourable weather in the autumn and spring terms some of these classes are held out of doors. The instruction consists of setting-up exercises, Swedish Drill, exercise on the running-tracks, and instruction in gymnasium apparatus work. In addition to this, "Learn to Swim" classes and instruction in life-saving are given in the swimming-pool.

In the academic year 1924-25, the number of men engaged in athletic sports in (1) Intercollegiate and (2) Interfaculty teams were as follows:—Rugby Football (Canadian) (1) 88, (2) 300;

Rugby Football (English) (1) 18; Association Football (1) 15, (2) 160; Track and Field (1) 18, (2) 123; Harrier (1) 6; Tennis (1) 5, (2) 141; Hockey (1) 20, (2) 204; Basketball (1) 36, (2) 240; Boxing, Wrestling, and Fencing (1) 17, (2) 75; Swimming and Water Polo (1) 18, (2) 124; Indoor Track (2) 50; Indoor Baseball (2) 121; Rowing (1) 27, (2) 60.

In the classes for Physical Training, 775 students were enrolled.

In addition to the above contests, annual trips are made by the Boxing, Wrestling, and Fencing teams to the United States Military Academy at West Point, New York, the United States Naval Academy at Annapolis, Maryland, and by the Varsity Hockey Team to Boston and New York. In the summer of 1924 the Varsity Senior Eight represented Canada at the Olympic Races in Paris.

The experience gained in the past five years since these regulations have been in force has been most valuable. While physical training is compulsory, the permission to engage in sports for which the student has an inclination, or to take military instruction and incidentally to qualify for an officers' certificate, through the Officers' Training Corps, is an added advantage to the student. The very apparent improvement in the physique and general health of the student during his college course has been one of the most gratifying results of our organization.

[From report by the Medical Director and Secretary, April 1926.]

MEMORANDUM BY THE DIRECTOR OF THE DEPARTMENT OF PHYSICAL EDUCATION, MCGILL UNIVERSITY.

ORGANIZATION OF THE DEPARTMENT OF PHYSICAL EDUCATION,
MCGILL UNIVERSITY.

THE attached Chart was prepared in an endeavour to show the relationship of the various phases of the work of the Department of Physical Education, McGill University. The outstanding features of the organization are the central administration, the close co-operation between the educational, recreative, athletic, normal training, health service, and remedial phases of the general programme for both men and women undergraduates.

In the outline which follows, a brief statement of the organization is given under letters which correspond to those on the Chart.

A. THE BOARD OF GOVERNORS

"The GOVERNORS of the University are the members of the Royal Institution for the Advancement of Learning, and in them are vested the management of finances, the passing of University statutes and ordinances, the appointment of professors and other important duties.

"The PRINCIPAL is the academic head and chief administrative officer."

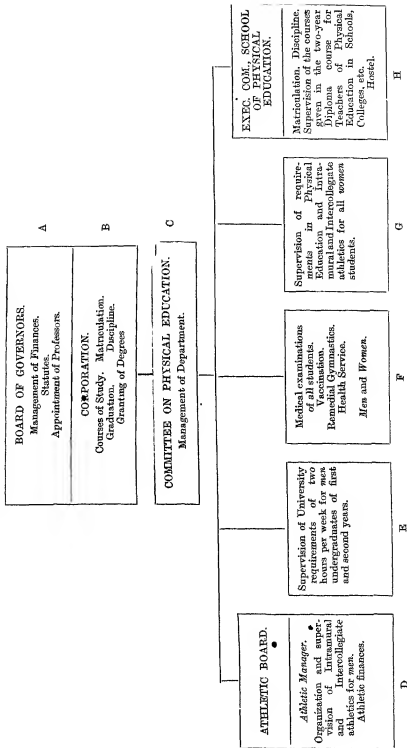
B. CORPORATION.

"The FELLOWS (45 in number) are selected with reference to the representation of all the faculties and departments of the University, and of the graduates, affiliated colleges, and other bodies.

"The Governors, Principal, and Fellows together constitute the CORPORATION, the highest academical body. Its powers are fixed by statute and include the framing of all regulations touching courses of study, matriculation, graduation, discipline, and the granting of degrees.

"The carrying out of the regulations of Corporation along with primary responsibility for the conduct of the educational work of the University is entrusted to the several FACULTIES."

CHART SHOWING ORGANIZATION OF THE DEPARTMENT.



C. COMMITTEE ON PHYSICAL EDUCATION.

The regulations of Corporation, concerning all phases of Physical Education, are carried out by the Committee on Physical Education with its several Sub-Committees.

Previous to the Session 1919-20 there were many Committees concerned with different phases of Physical Education in the University. Each one had some definite responsibility, but had little or no relation to other Committees, whose interests in many cases demanded that there should be a very close working relationship. During the Session 1919-20 a reorganization occurred, in order to bring under one Committee with a central administration all the Committees which had to do with any phase of Physical Education. The result was the formation of the Standing Committee on Physical Education, the composition of which is as follows: (1) Chairman: The Principal of the University. (2) One representative from the Board of Governors. (3) Two representatives at large: (a) appointed by the Board of Governors; (b) appointed by Corporation. (4) One representative from each of the Faculties of: (a) Medicine; (b) Applied Science; (c) Arts; (d) Law. (5) Secretary and Bursar of the University. (6) One representative from the Graduates' Stadium Committee. (7) Warden, Royal Victoria College. (8) Comptroller, Students' Council. (9) President, Students' Council.

The Director of the Department was given a seat on Corporation, and special Sub-Committees were appointed to deal with women's activities, financial matters, and courses of study in the professional School of Physical Education.

In the Session 1922-23 an Athletic Board was formed as a Sub-Committee of the Committee on Physical Education, having as its responsibility the administration and supervision of the entire athletic programme for men undergraduates. The Athletic Board so created has no responsibility whatever concerning the general finances of the Department, its responsibility being confined entirely to the athletic programme for men. A special statement of the duties and responsibilities of the Athletic Board and the other special phases of the Department follows.

D. ATHLETIC BOARD.

The composition of the Athletic Board is as follows:—Chairman: The Principal of the University; three members of the Teaching Staff; Secretary and Bursar of the University;

a representative of the Guarantors of the Stadium; three Graduates; three Undergraduates.

As previously stated, the Athletic Board is responsible for the administration and supervision of the entire athletic programme. Its responsibility is through the Committee on Physical Education to Corporation and the Board of Governors. All matters which in any way affect athletics must be referred to the Athletic Board, and its approval must be obtained before any departure is made from the authorized routine.

All men undergraduates of the University are required to pay a fee of ten dollars for a book of general admission tickets to all home games and for the use of the grounds (this is included in the general fee of seventeen dollars paid by undergraduates). The amount so paid is credited to the Athletic Board, and is by this body expended in the interest of college athletics under the general direction of the Department of Physical Education.

The Athletic Manager is the executive officer of the Athletic Board, and directly supervises the administration of athletics. The Board must have submitted to it for approval all rules and regulations governing athletics. It controls the eligibility of players, sanctions suspensions, reinstatements, athletic insignia, etc. It controls all gate receipts and revenue, the selling of tickets, the purchase of equipment, supplies, etc. All revenue is turned over to the Bursar's office, and all goods purchased must be requisitioned for through the University Purchaser. The athletic policy is, therefore, a University policy and any deficit occurring in connexion with the conduct of athletics is borne by the University.

The Athletic Manager and Coaches are members of the staff of the Department of Physical Education, and bear, therefore, the same relationship as members of the staff of any other department in the University. The Athletic Manager and Coaches are appointed by the Board of Governors of the University on the recommendation of the Athletic Board in consultation with the Director of the Department.

The Athletic Manager conducts all correspondence relating to athletic schedules, special matches, etc., and supervises all interclass, interfaculty and intercollegiate athletic contests. He is also responsible for the administration of the field houses, hockey rinks, and tennis courts.

Before participation in athletics all students must have passed the University Medical Officer, and must have received an appropriate category. All students must attain a certain academic standard before they are permitted to take part in

intercollegiate contests. Suspension from lectures, for any cause, is considered sufficient ground to disqualify a student from enagaging in athletic contests.

E. UNIVERSITY REQUIREMENTS IN PHYSICAL EDUCATION—MEN.

All men students of the first two years are required to devote two hours per week to some form of physical exercise. If after the medical examination they are found fit to take part in athletic activities, they may select the form of activity they desire. If they fail to choose any type of athletics, they are then required to attend the regular gymnasium classes, provided they are physically fit to do so.

At regular intervals during each session, and also at the end of each session, the Director of the Department furnishes the Dean of each Faculty with a list of students who have failed to meet the attendance requirements as laid down in the ordinary curriculum, or who have proved unsatisfactory in other respects, and such cases are dealt with by the respective Faculties.

No student in default is allowed to proceed to the next year of his course unless for special reasons exemption should be granted on the recommendation of his Faculty and approved by the Committee on Physical Education.

Not less than one month before the conferring of degrees in each session the Director furnishes to the Registrar of the University, for transmission to Corporation and the Faculties concerned, a list of all students, being candidates for degrees at the forthcoming Convocation, who have failed to satisfy the requirements of the Committee on Physical Education, and no Diploma for a degree is issued to any such candidate unless by the express direction of Corporation.

F. MEDICAL EXAMINATIONS—VACCINATION—REMEDIAL GYMNASIICS—HEALTH SERVICE—MEN AND WOMEN.

(1) *Medical Examinations — Vaccination — Remedial Gymnastics.*—All students coming to the University for the first time are required to pass a physical examination conducted by University officers. Students of the second year, as well as those of all years, who wish to engage in athletic activities are also required to be physically examined.

All students entering the University for the first time are required to present a certificate or other satisfactory evidence of successful vaccination within the past seven years, failing which they shall at once be vaccinated in a manner satisfactory to the medical examiner.

Students who do not present themselves for this examination (or otherwise, satisfactory to the Director) before 1st November are not allowed to attend the University.

At the time of his medical examination, each student is required to fill in a card indicating his choice of the type of activity he desires to follow. The Director then decides as to his physical fitness for the form chosen, informs the student of his decision, notes the same on his card, which is filed for reference. Every student is categorized by the University Medical Officer as either:

- (a) Fit for all forms of exercise.
- (b) Fit for a limited number of forms.
- (c) Fit for gymnasium work only.
- (d) Required to do remedial gymnasium, or temporarily unfit.
- (e) Unfit for any form of physical exercise.

By such an examination, physical defects and weaknesses may be discovered. If such defects and weaknesses are amenable to treatment by corrective gymnastics, special exercises are prescribed and instruction provided. The students are advised as to what forms of exercises will be likely to prove beneficial or harmful. Re-examinations are conducted frequently throughout the session for those students who are of low category, or who are suffering from physical disabilities.

During the Session 1925-26, 1134 men and 316 women were medically examined, making a total of 1450; 80 per cent. of the men examined were found to be in Category "A." It is interesting to note the comparative figures of the students who were insignia winners in athletics, as compared with the general student body.

AVERAGE OF ALL MEASUREMENTS TAKEN.

Age.	Weight.	Height.	Chest Contraction.	Chest Expansion.	Waist.	Lung Capacity.
19-9	lb. 132	in. 67.3	in. 32.6	in. 34.9	in. 27.6	cu. in. 222.5

AVERAGE OF THOSE WINNING ATHLETIC INSIGNIA.

Age.	Weight.	Height.	Chest Contraction.	Chest Expansion.	Waist.	Lung Capacity.
20-9	lb. 147.1	in. 68.6	in. 33.9	in. 37.1	in. 28.9	cu. in. 263.6

(2) *Health Service (Men and Women).*—In order to meet the demand for medical attention to students who were unfortunate enough to take ill during the College Session, there was organized in the Session of 1920-21 a Health Service to take care of such cases. At this time the University fees were being re-adjusted, and authorization was secured to include in the undergraduate fee the sum of two dollars, which was set aside for this service. A daily consultation hour is held from 12.30 to 1.30 p.m., at which each student can receive medical advice, and also be prescribed for. In addition, the University Medical Officer visits the homes or boarding-houses of students who are not well enough to attend College. If, on examination, it is found that a student requires admission to the hospital, it is done so by requisition, the expense being borne by the University for the first seven days. The object is to take care of the out-of-town students, who, perhaps, are not members of any fraternity, and have not friends in the city. Care has been taken not to interfere in any way with the practice of private practitioners, and in this regard the University has been very fortunate through co-operation with specialists for the purpose of consultation, and with the city hospitals for a very satisfactory arrangement concerning a minimum charge for the service rendered students who are admitted to them.

COMPARATIVE STATEMENT FROM SESSION 1920-21.

	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Students registered . . .	2054	2039	2063	1918	1800
Office consultations . . .	992	1769	2351	2478	2463
Visits to Homes . . .	184	277	374	239	263
Percentage of students receiving attention . . .	23	35.0	44.3	44.5	50.0

LOST TIME ON ACCOUNT OF SICKNESS FROM 1922-23.

	1922-23.	1923-24.	1924-25.
Number of students	604	626	1094
Total days lost	2100	1905	3271
Average number of days per student	3.4	3.04	2.9

G. UNIVERSITY REQUIREMENTS IN PHYSICAL EDUCATION— INTRAMURAL AND INTERCOLLEGIATE ATHLETICS—WOMEN.

The regulations governing vaccination and medical examinations are applicable for women students just as in the case of men. Women undergraduates in the Faculties of Arts and Music are required, throughout the four-year course, to attend 140 hours of instruction in the Department. This instruction includes educational, remedial, and recreative gymnastics, instruction in personal hygiene, etc. The students are grouped according to experience, ability, and fitness, and the course is arranged in a progressive manner throughout the four years of attendance.

In addition to the regular gymnastic classes, intramural competition is conducted in fencing, skating, ice hockey, basketball, tennis, track and field, field hockey, and swimming. Intercollegiate competition is conducted on the tournament basis once each session in basketball only.

All gymnastic and athletic activities are organized and supervised by the women members of the staff of the Department.

H. SCHOOL OF PHYSICAL EDUCATION.

The McGill School of Physical Education was organized in 1912, in order to train teachers of physical education to meet the demand for skilled supervision of physical activities in schools, institutions, colleges, etc. It has grown from a short summer course to a full two years' course, and is now officially recognized by and is an integral part of McGill University.

The work in the School, covering such matters as matriculation, discipline, courses given, etc., is supervised by the Executive Committee of the School of Physical Education, which is constituted as follows:—Chairman: Director, Department of Physical Education; University Medical Officer; Physical Director for Women; Warden of the Royal Victoria College; a member of the Faculty of Medicine.

An extract from the Announcement of the School follows:—

"The modern conception of education is one of intellectual, moral, and physical development, and not, as has been too frequently misunderstood, the development of the intellect alone. Physical education, including as it does instruction in the laws of health and hygiene, with participation in all forms of physical activity specially selected for the stage of mental and physical development of the child, offers a splendid oppor-

tunity for not only increasing the efficiency of the human machine, but also for the development of social and moral qualities in the lives of our future citizens."

A two-year course, from September to May inclusive, is given in the theory and practice of physical education. This course is required for the Diploma of the School, and gives the student a thorough understanding of the mechanism of the human machine—its anatomy, physiology, and the underlying principles governing the various functions of the mind and body. The student is made familiar with the theory and practice of physical education in its many forms, and, in addition to actual participation in the various activities, there is, before graduation, a considerable amount of time devoted to practice teaching under supervision.

A residence in charge of a resident tutor, in the immediate vicinity of the Campus, is conducted by the University, and is available for students of the school.

The registration is limited to fifty, there being students in attendance from almost every Province. Graduates of this School are scattered throughout the country conducting and supervising activities in physical education, in order to promote and maintain the vigour of our Canadian manhood.

FRIDAY, JULY 16—Morning Session.

CHAIRMAN:

THE RIGHT HON. THE VISCOUNT CECIL OF CHELWOOD, M.A.,
D.C.L., LL.D., K.C., CHANCELLOR OF THE UNIVERSITY OF
BIRMINGHAM.

“The actual working of the Ph.D. Scheme.”

SEVENTH SESSION.

THE CHAIRMAN: The subject for our discussion this morning is the actual working of the Ph.D. scheme, and it would be the height of impertinence on my part if I were to venture to discuss that subject at all. My incompetence would be too clearly revealed if I did so. I shall, therefore, occupy your attention for a very few minutes, and shall not attempt to deal with the subject with which many of you are familiar to a degree to which I cannot pretend. One thing, however, I may say, as a more or less intelligent onlooker, and that is that I am as conscious as anybody in this room of the enormous importance and value of research. Indeed, looking at the economic condition of the world, and of this country in particular, I believe that research is perhaps the most important subject to which we can turn our attention. We must, in every branch of our intellectual life, and indeed of our economic life, increase production, and it is only by developing those faculties of invention and discovery which have so often stood us in good stead that we can really hope to overcome our present difficulty. I suppose it would be admittedly true that after the Napoleonic wars, when much the same conditions prevailed, it was the great impulse and stimulus conveyed by the work of research and of invention in the immediately succeeding years which enabled us to overcome the tremendous difficulties with which we were then faced, but difficulties very, very far less than those with which we are faced at the present time.

If a passing reference to actual events may be pardoned, I am not at all sure that a really impartial and scientific investigation of the trouble in the coal industry would not reveal the fact that part, or a good deal, of it is due to the insufficient attention which has been given in past years to the value of research in that industry. And, if research is valuable in its actual results, the existence of researchers is even more valuable. Without such men as our great researchers there can be no brilliancy, no real success, scarcely even the existence of Universities; for it is those men who give to the whole work of a University the inspiration without which it cannot really exist. And, if the researchers are essential to the University, they are not less essential to the whole civilized world. We know that without vision the people perish; without vision the ordinary work of humanity cannot be carried on; and vision comes, not to the idler or to the plodder, speaking generally, but to the man who keeps the whole of his faculties—concentration and

reason as well as his imagination—on the stretch. That is the true spirit of the researcher, and it is to him that we must look for our inspiration and our success. Though it may be true that poets are born and not made, I have sometimes had doubts even on that point, but I am quite sure that in the ordinary development of intellectual activities you want both natural endowments and careful and severe training. It is to encourage that training that the degree of Ph.D. was instituted.

As I said, I should be impertinent if I were to discuss its success or the suitability of its methods. Again, speaking as a mere onlooker, it is at any rate of great interest to note that in this degree we appear to be returning to the original plans and schemes and system of education on which the original Universities were founded. I would not venture to say whether that is so or not, but that is how it appears to the onlooker. To my mind, on the success or failure of these efforts to encourage research very much of the success even of the Universities depends; and to my audience, who know the facts better than I do, we must look this morning for illustrations as to whether the working of the Ph.D. scheme has or has not been a success.

Discussion.

MR PRIESTLEY (Cambridge): From inquiries among my friends representing other Universities upon the Congress I find that what they most desire to hear is an expression of opinion, supported as much as possible by facts, as to the measure of success achieved during the six years since the Ph.D. scheme was inaugurated in Cambridge. The system adopted was framed by a Syndicate appointed "to consider the means of promoting educational collaboration with the Universities of the Empire and foreign Universities." At the same time that the investigation in Cambridge was going on, the first Congress of the Universities of the Empire made general recommendations for the establishment of a co-ordinated scheme of post-graduate study. These recommendations, together with the evidence brought forward at the meetings of the Syndicate, soon made it clear that, to be successful and to attract the desired class of students, any scheme adopted must include the granting of a degree, and that this degree must be a Doctorate. Both these provisions were in the opinion of the Syndicate made inevitable by the previous existence of the Doctorate of Philosophy in Germany and America. Many opponents of the new degree as applied to Cambridge were reconciled to its establishment by the clear necessity for making the new scheme an adequate counter-attraction to the German and American degrees, which were in many cases conferred under a system upon which it was considered desirable to improve.

These general principles being recognized, the next task of the Syndicate was to adapt the general scheme to the special conditions of the Cambridge environment—that of an institution the essentials of which are residence and the association of each student with a particular College. The present research regulations, so far as they affect candidates for the Ph.D., are the result of this adaptation. The addition of the lesser degrees—M.Sc. and M.Litt., which had not previously been granted by Cambridge—was a necessary secondary outcome of the larger scheme. They were intended to meet two special situations. Many students are unable from financial and other considerations to spend more than a total of two years upon original research. Some candidates who fail quite to reach the higher standard insisted upon for the Doctorate, yet do work of sufficient merit to be worthy of some recognition. If a high standard for the Doctorate is to be maintained, some such use of the lesser degrees unfortunately appears to be essential.

The Ph.D. regulations have now been in operation in Cambridge for six years, and the number of students involved has been sufficiently great to make it possible to form some estimate of the measure of success achieved. Copies of the regulations and of the last Annual Report of the Board of Research Studies—the authority which co-ordinates supervised research in the University and the establishment of which was an important part of the recommendations of the original Syndicate—have been distributed to-day. From the Report the present situation as regards numbers and distribution of students can be seen at a glance. In some respects the scheme may still be considered to be in its experimental stage, but there is a considerable body of evidence which suggests that, although it is by no means ideal, its adoption has been a step in the right direction. To begin with, the increase in numbers, from 70 to over 280 in six years, is in itself a proof that the system is serving its main purpose, that of causing increasing numbers of men and women to prolong their education sufficiently to obtain a thorough training in methods of research, usually in a fresh academic environment.

The number of our own men involved has increased from 14 to 90, but in spite of this, there is still a substantial increase in the number of graduates from other Universities (from 58 to 184). This increase is sufficient evidence that the “promotion of educational collaboration” referred to in the title of the original Syndicate is being achieved. An increasing proportion of the best of the students of the Universities, not only of the Empire but of the whole world, is being attracted to Cambridge. Both the University and the men themselves must benefit greatly from the migration.

Increase in the number of Cambridge graduates entering for the Ph.D. degree is of particular interest as affording visible proof of the overcoming of the local prejudice against the new Doctorate which was freely expressed during the discussion of the Syndicate's proposals. From other points of view as well, this participation of graduates of Cambridge in a scheme primarily intended for immigrants from other Universities is noteworthy. So long as a considerable proportion of the best of our own post-graduate students elected to remain without the scheme, the standard of dissertation naturally was likely to remain at a lower level than is reached at present when the majority have overcome their prejudices against the new Doctorate and have registered. From the standpoint of research generally—quite apart from the vexed question of the degree—it cannot but be

a good thing that as large a proportion as possible of research workers in training should come within the scope of a system which has the organization of supervision as one of its main objectives. In addition, the fact of their having been a part of the system should cause these men, whether they have troubled to take the degree or not, to maintain an interest in organized post-graduate work. It is from among them that many future teachers and directors of research in this and other Universities will be drawn.

The increase in the proportion of Cambridge graduates among research students at their own University does at first sight militate against that ideal of circulation between Universities which should be an important aspect of any post-graduate scheme. Such a circulation appears to the present speaker to be desirable from every point of view, and the research regulations in this University encourage it as much as possible by permitting graduate research students to spend two out of their three years away from Cambridge. The perfection of interchange cannot, however, be attained without much more generous financial aid than is at present available. In the meantime it is distinctly preferable that Cambridge graduates should join the scheme rather than remain aloof although working in Cambridge. It is to be hoped that this aspect of the situation—a reciprocity of post-graduate migration—may receive more attention in future. The one drawback to the suppression of the junior 1851 scholarships and their replacement by an extension of the D.S.I.R. maintenance grants has been the fact that normally the latter are given for the continuation of work in the student's University of origin.

The value of the new Doctorate in the commercial and in certain circles of the educational world is attested by letters from men who have taken the research B.A. degree at Cambridge in the days previous to the inauguration of the Ph.D. scheme and who find themselves handicapped in competition. This is an unfortunate fact, but it is valuable evidence of the difficulty of refraining from granting the degree under modern international education conditions. Perhaps the most important corollary to the increase in number of graduate research students is the opportunity which is thereby provided for keeping up the standard of the degree. This is a difficult task in view of the number and variety of subjects involved, but it is one essential to the useful development of the scheme of post-graduate work whether in Cambridge or elsewhere.

In the present year a slight falling off in the increase in

numbers is apparent. This is more than accounted for by the fact that certain popular scientific departments have now been filled to capacity and can only take fresh men by replacement. This congestion naturally leads to a slowing down of the increase upon the science side, the limiting factor being laboratory accommodation. The slower growth in numbers has its advantages. One result is a greater degree of balance between the different subjects, another is the simplification of problems of supervision and administration. A slow-growing scheme is more likely to stand the test of time.

Other evidence in favour of the success and permanence of the scheme is the tendency towards equalized distribution among Colleges. It is natural that some Colleges, and particularly the larger Colleges, should accept more research students, but all Colleges are at present loyally co-operating with the Board. I think also that at all Colleges the research student is being recognized increasingly as an asset to be cultivated both for his own sake and for the sake of his College. It is a significant fact that, in spite of a 100 per cent. increase in numbers since 1921, the total of non-collegiate research students has been reduced to nearly one-half the number in that year. There is a tendency to increase the number and value of scholarships and studentships at the Cambridge Colleges which are open to graduates of other Universities. There has during the past year or two been an increasing disposition to elect research students to Fellowships or to make use of their services as temporary or permanent lecturers in University departments.

At the last meeting of the Board of Research Studies, the question of the success of the scheme was discussed by the authorities most closely connected with its administration and therefore in the best position to form an opinion as to its working. There are serving on the Board representatives of the following Degree Committees:—Physics and Chemistry, Biology and Geology, Mathematics, History, Modern Languages (including English), Oriental Languages, and Law.

Opinion was unanimous that, while in detail many improvements yet remain to be made and the full effect of the scheme is not yet visible, on the whole it is working successfully. This is naturally plainer in some departments than others. For instance, the results are visible more rapidly and more plainly in science than in literary subjects. Nevertheless, good work is being done and the authorities are, speaking generally, satisfied in many departments on the literary side. Only this last week I have had a letter from a member of the History Degree

Committee emphasizing the good work which is being done by research students in history and allied subjects, and I think similar tributes would be forthcoming from other departments.

I gather that in some Universities one obstacle to the satisfactory working of the Ph.D. scheme has been the difficulty of fitting in satisfactorily an intermediate degree between the primary degree based upon examinations and the higher research Doctorates already in existence. This difficulty has not arisen to any extent in Cambridge, where the higher Doctorates cannot in any case be obtained as the result of three or four years' original work. After taking his B.A. degree the Cambridge graduate has to wait some years for his M.A. It is not until five years after he has become a member of the Senate that he can apply for the higher Doctorate. Usually a considerably greater time elapses, and the result of the application is by no means a foregone conclusion. The taking of the higher degree is thus very much the exception, and several years of original research in the fullest sense of the word "original" are a necessary preliminary. There has thus been plenty of room and scope for the interpolation of an intermediate degree which could be granted after three years' "supervised" research. The conferring of the Ph.D. degree should connote a considerable training in research methods, the possession of originality, and the power of writing a thesis of reasonable lucidity and literary quality. It is the hall-mark rather of the potential than of the mature research worker, and, in the Cambridge view, the extent and quality of the supervision which the research student receives is of the utmost importance.

The general course at Cambridge consists normally of three years' original research work under supervision appointed by the Degree Committee concerned. This may, however, be modified and frequently is modified to a normal minimum of two years and a maximum of four years. The minimum period is in no circumstances allowed to be shortened, the maximum may be exceeded as the result of special individual application with proof of exceptional circumstances, such as illness or pressure of full-time educational work. A fifth year is often allowed: further extension only under very exceptional circumstances.

The above limits being fixed, the only variation further possible is in the place of work. Here, as already mentioned, the Cambridge graduate is given a large amount of latitude, one year's work at Cambridge being the minimum; while even this year may have been carried out before registration. The

original scheme allowed a great measure of discretion as regards non-graduate research students also, the minimum for them being one year after registration. This concession was always granted very sparingly, and has now been withdrawn in consequence of a new University regulation which insists upon a minimum of two years' residence before any Cambridge degree can be conferred. With this ordinance the Board of Research Studies are fully in sympathy. They feel that it is to the advantage of the research student himself that the Cambridge Ph.D. should be more than a certificate of three years' successful research. It should also indicate that the student has resided for a sufficient period to enable him to absorb the Cambridge atmosphere and to understand, if not to appreciate, the Cambridge point of view.

Another cogent reason for insisting upon a minimum of two years' residence is the undoubted occurrence of a period of acclimatization, both physical and mental, on arrival in Cambridge. This period may extend for a few weeks or for as much as a year according to the physique and temperament of the individual and the degree of change of environment. Some students unfortunately never become acclimatized and casualties have occurred both from physical and from temperamental reasons. In several cases supervisors have definitely reported a lag of a term or more through sickness or lack of adaptability. Even from the point of view of University tradition and discipline there is a tendency, perhaps a natural one, to "kick against the pricks" at first. I have myself lively recollections of settling in Cambridge immediately after I had lived for three years on the Antarctic Continent and had wandered about Australia for a fourth. It was a novel experience to be locked into my rooms at ten o'clock by a blind landlady. Much can be done by the College authorities to shorten this period, but it does and will occur, and is a definite argument in favour of the two-year minimum residence.

A corollary to this reform will, however, be a marked increase in the importance of the regulation (paragraph 19) which permits of research students registering for one year's work, or even less, with the object of obtaining a certificate of research which will count towards a Ph.D. degree at some other University. Several men have already taken advantage of this regulation, and a greater number will wish to do so in future. It is, indeed, highly desirable that as many as possible of those research workers who for various reasons are only able to spend a year or less in Cambridge should register under the scheme.

Only by doing so can they enjoy the privileges appertaining to membership of the University. The advisability of this has been much impressed upon me by foreign students whom I have met socially in connexion with my duties. It is satisfactory to know that the authorities dealing with the Rockefeller Institution scheme in Europe agree as to the importance of this and intend to give effect to their opinion in the immediate future.

The two years' minimum of which I have spoken above is quite a normal period for the course. From among 103 non-graduate research students who have qualified for the Ph.D. degree to date, 56 have taken advantage of the regulation allowing a year's exemption for work done before arrival in Cambridge. The reason for this is largely financial. The cost of a year at Cambridge to an overseas student who desires to profit to the fullest extent from his stay in Europe is very considerable (about £350), and the monetary value of scholarships unfortunately is usually not adequate. Many of our best men therefore prefer to do the first year of their course at their home University. From the point of view of the authorities here this procedure is a desirable one. The modern tendency is to place research on a plane by itself. The consequence has been an influx of men not particularly fitted for original work. A year's post-graduate study, which invariably includes the preparation of at least a semi-original dissertation, may serve to convince many students that research is not their métier, a truth not necessarily driven home by the normal undergraduate course or by examinations. The value of the letters of recommendation which the successful student brings is naturally greatly enhanced. His preliminary training also makes him more able to meet on equal terms his co-workers from Cambridge and from other Universities. At the close of two years' work in Cambridge he will have completed three years' research without having to devote a considerable proportion of his time to teaching or to working at specified industrial problems, as frequently happens when a man is obliged to take a post to help out his financial resources.

I have said as much about the research courses in Cambridge as I can crowd into fifteen minutes. In conclusion I should perhaps admit that there are still many people in Cambridge who disagree with the institution of the degree. I can only claim that I believe I have expressed the considered opinion of those who know most about the operation of the system. Amongst the delegates to the Congress I see several familiar

faces of research students actually taking the course at the present time. From them I should welcome confirmation, elaboration, or criticism of what I have said, whether expressed now or later when they visit me, as I hope they will.

PROFESSOR R. M. WENLEY (Director, American University Union): Despite a preference for *ex tempore* speech, considerations of time and accurate statement have led me to reduce these remarks to writing. Then, too, I shall not lose consecration if you interpose with questions at any point; and this I invite you to do.

Of course my main thought (to which I shall return at the close) has reference to the bearing of the British Ph.D. upon the prospects of American candidates. Needless to say, the situation in the United States must be grasped in order to appreciate this.

Although the organization of post-graduate study the country over has been achieved mainly since 1896, the date of my own immigration, the problem invaded immediate practical politics for the older Universities upon the foundation of Johns Hopkins University in 1876. Whatever the strong animosities aroused during the formative period, one touches no sore spots when he says that Johns Hopkins ploughed with the German heifer. Berlin and the rest gave the lead; naturally enough, seeing that Americans had been resorting to Germany since the "forties." Accordingly, the Ph.D. became and has remained the highest degree attainable by study in residence. Broadly speaking, the definite crystallization of the chief graduate schools post-dates 1906. In other words, a generation of experiment and, often, hot debate marked the gradual progress of the Ph.D. to its present definitive status. If the outsider sees most of the game, I may permit myself the assertions that, as is usual with such movements, the participants remained unconscious to some extent of the forces swaying them; and that the causes were largely, though by no means exclusively, two. First, the human (or historical) disciplines had been brought to birth during the nineteenth century and, in the same decades, the natural sciences had undergone the transformation destined to produce the "research" appeal of the technical sciences at the close of the century. Second, the American "College" had developed neither methods nor intensification of work requisite to cope with the new knowledge and its stringent demands. The former happens to be so trite that one will dismiss it with mere mention. The latter is so little fathomed outside the

United States, and still continues to affect the condition of affairs so profoundly, that it calls for some comment.

American circumstances have produced two unique educational organs: the rate-supported High School—a development of the twentieth century; and the “College.” We must pass over the High School; but I find that the “College” is a mystery to the other English-speaking peoples. Nor do I blame them, because it may be a self-contained institution of the type, say, of Amherst or Swarthmore; or an integral part of a great University of the type, say, of Harvard or Michigan; moreover, it is as much *sui generis* as the English Public School, the French *Lycée*, or the German *Gymnasium*. We may premise that, till within the last fifty years, the “College” was not widely different from its congener in the Mother Country. This because it presupposed the academy—a school furnishing a sound course in the classics and elementary mathematics, a little English, a taste of a modern language, and a mere glance at natural science. This kind of training was continued in the “old” College, chiefly along the lines of “literary” scholarship, affording a good preparation for the venerable “learned” professions—the churches, law, medicine, in a rather left-handed way, and, of course, teaching. In one respect, however, a fundamental difference held away, which you must stress because it dominates our situation now—there was no division into Pass and Class.

With the twentieth century the adoption of the Elective System inaugurated a new phase. The contemporary “College” requires a four-year course, in which the work of the first year and the greater part of the second year pertain to secondary education. By and large, the “College” B.A. is a pass degree; anything comparable with British Honour *status* is supplied by liberty to specialize within a definite field during the third and especially the fourth years. Hence the clamant need of the graduate school in which real Honours work is done; but hence also fundamental differences inseparable from our arrangements. Provided his college be of sufficient standing, any B.A. may enter a graduate school, and, as a matter of fact, hundreds do enter who have no intention of proceeding to the Ph.D. The M.A. or the M.S. satisfies their requirements. Hence, once more, the necessity for safeguarding Ph.D. candidacy. This is managed somewhat as follows:—

- (1) Theoretically any acceptable B.A. may intimate to the authorities that the Ph.D. is his goal; but
- (2) After one year or more of study he must

- (a) Apply to be approved as an accepted candidate for the Doctorate;
- (b) By presentation of the consent of his supervising committee;
- (c) Submission of evidence that he can use French and German for research, and
- (d) This is further strengthened, as a rule, by imposition of a preliminary examination of a general character in the subjects of his speciality.

A small minority get through these meshes which, you must recall, are our substitutes for a class in Honours.

While it would be folly to deny that recipients of the Doctorate vary widely in ability, it is necessary to insist that the degree possesses unique value within the range of American academic conventions. For, first, it has no competitor. The D.Litt. is not conferred save as an honorary degree, and the D.Sc., while it may be substituted for the Ph.D., is selected in few cases, and has become almost exclusively an honorary degree also. Second, the Ph.D. receives more and more acceptance as a certificate of training. Third, it is being required as the degree proper to those who desire to adopt the profession of College or University teaching. Fourth, as a result, the standard of attainment is kept on a respectable level at least. Thus, possession of this degree greatly affects the prospects of American recipients, especially in their earlier professional years.

It therefore occurs to me that, if the British Universities treat it as something less valuable than the D.Litt. or the D.Sc., there might be disappointment, unless the peculiar adjustment of this new Doctorate to the situation in Great Britain were made perfectly clear to American candidates. As I understand, your Ph.D. is to represent training principally; the D.Litt. and the D.Sc. attainment. On the whole, in the circumstances in which the graduate schools find themselves, training is exactly what the Ph.D. does represent in the United States. Achievement must come later and be recognized, if at all, by an honorary degree or, as is our growing convention, by election to one or other of the specialist scientific societies.

PROFESSOR DOBSON (Bristol): In the first place I would congratulate the Assistant Registrar for Research Students on the very clear way he has described the condition of things at Cambridge, and the University of Cambridge on the excellence of the arrangements and the regulations which have been made

for Ph.D. students. The greeting of every University to new students should be *Date et dabitur*, and new students receive this greeting and follow it out; the undergraduate consciously takes the best Cambridge can give him, and unconsciously gives the best that is in him. This giving never stops, though perhaps we do not realize it; for the good work done by a man after leaving Cambridge, just as much as the work done there, confers reflected distinction on the University, and so the giving is on both sides. The most obvious giving comes during residence—the reaction of one undergraduate on the Many and of the Many on the One; for the Many are, of course, an important part of the University which cannot consist of ten men any more than Aristotle's State; and it is the large body of men, acting and reacting on one another, which promotes learning and education in much broader senses. Such interaction of the ordinary men is increased by the influence of men who are here to prosecute advanced studies. They will teach while they learn, and in Cambridge the close association which is provided by College life makes the benefit derived from having a large number of researchers very much greater than it would be in other places where contact is less close. I may say that in this matter I am much impressed by what has been done in Cambridge, but I am not prepared to believe that everything which has been done here can be done in other Universities which, in the first place, may be smaller and, in the second place, may not provide the same residential facilities and close corporate life.

Mr Priestley has told us, and many who were present some years ago at the meeting in London will remember, that one of the chief arguments for the institution of this degree was that we should come into competition with Germany and induce the gifted but guileless American to accept our degree instead of the German one to which he was accustomed. We were told that we should have clever young Americans coming over to us in great numbers, spreading themselves over this country among the various Universities, thus giving us the very best and taking away the best that we can give.

Events seem to have proved that the gifted American is not quite so guileless as we expected, and has not always been caught by this kind of salt on his tail. You have a large number of Americans at Cambridge, but it turns out that the number of Cambridge men actually studying for the Ph.D. more than twice outnumbers the Americans. These men you would probably have had in any case; therefore it is a question whether the institution of the Ph.D. has benefited you in this matter.

Graduates of other Universities have come to Cambridge for many years past in considerable numbers since the granting of special facilities to advanced students. This migration began to be popular at the time when I was an undergraduate, when many graduates of other Universities came here to study under some particular person, most noticeably to work under Professor Thomson at the Cavendish Laboratory. During those first years many students, among them men of note who have attained great distinction since, came to Cambridge to do research, not for the sake of any Doctorate—the B.A. was quite good enough for them—but to work under the guidance of some particular person—in this case the distinguished scientist I have mentioned. I have no doubt that the Cavendish Laboratory, which is at present directed by the most distinguished of those early research students, still continues to attract men who are equally good, but I should like to ask whether it attracts better men than we got in those days, and whether it attracts men because they can get the Ph.D., or because they can work there under specially favourable circumstances? Men may be attracted because they want to work at a particular subject under a particular man who meets all their requirements.

So far, then, it has not been proved that the Ph.D. is not superfluous. The condition of life in Cambridge is different from that in modern Universities. For one thing, of course, there is the great difference in the importance attached to the Master's degree. I myself found that to obtain it I had to prove that I had lived a certain number of years after taking my Bachelor's degree. I was then admitted on probation, but, when I supposed the authorities of the University had had time to satisfy themselves that I was alive, the degree was granted without any further investigation. The modern Universities have always stood out against that sort of thing. I am not defending one method or the other of awarding an M.A. or M.Sc. degree, but this degree in one of the modern Universities normally means the prosecution of research in that University for a period of at least two years after reaching the Honours standard and the B.A. Therefore they had already a research degree of a certain kind in existence.

The problem then was what to do with an extra degree, a so-called Doctor's degree, to be fitted on above that and yet below the real Doctorate. Many people, I believe, do not know yet exactly how the Ph.D. students stand with regard to the M.A. I had an application the other day from a man who wished to work for a Ph.D. I wrote to one of his references on

the staff of another University, who answered: "So-and-so is not a bad student and I should think would be quite suitable for your purpose. I should perhaps rather have recommended him to try for the M.A. except that there is very little difference between the two nowadays, and I know he wants to be called a Doctor for professional purposes." I must now recall myself to the main point—the actual working of the Ph.D. scheme in a modern University; I wish to tell you of the conditions in my own.

In the science laboratories we have many good men from time to time working for the Ph.D. I am not sure that they, as in the case of Cambridge, would not have been working there now irrespective of a degree. They would probably have been working for their M.Sc. On the Arts side, about 90 per cent. of the applicants are not really *bona fide*. They do not want to do research work except that they have to in order to obtain a Doctorate. A great many aspirants have to be refused because their claims are too shadowy. Many have taken degrees elsewhere, and some have applied for registration for the Ph.D. elsewhere and have been refused. They then go to a University where they are not known and propose to have some nominal connexion with it, and at the end of the time send in work which they hope will get them the degree. On the other hand, we have a certain amount of genuine applicants, who, perhaps, though they may be already engaged in full-time work, are genuine because they really have a desire to go on in their leisure time with some particular work in which they can get instruction in a University. The number of these is not very great on the Arts side, and we have the difficulty about them that, to my mind, they are quite incapable of fulfilling the purpose—that they ought to be able to give as well as to take. A man who is loosely associated with a modern University, perhaps meeting a professor of his subject once a week, but really engaged most of the time in other things, cannot take part in the intellectual life of the University in the same way as if he were a full-time student living in a College and meeting other advanced students and pass students of every kind.

But what I wish to stress is that there is a considerable number of people who wish to enter for the Ph.D., not on account of the research involved for which they may be and often are supremely unfitted, but to gain a certain title; and the spirit is wrong. So long as people undertake this kind of research, not for the sake of research itself, but in order to get a broader hem on their gowns and to receive honourable greetings in the

market-place, I do not think the Ph.D. can claim to have justified its institution.

PROFESSOR NEWTON (London): I think I can make my best contribution to the subject we are discussing, the actual working of the Ph.D. scheme, by giving what evidence I can as to what has happened within my own experience in the Institute of Historical Research in London. In some ways this experience may be revealing, especially as complementary to that of Mr Priestley who has told you the experience of the University of Cambridge, covering the whole of the subjects. My experience is confined to history and the work done in the Institute of Historical Research during the last six years.

In the Institute of Historical Research I see the qualifications of many students and get to know the type of man who desires to be a candidate, either for a research M.A. or a research Ph.D. The evidence I have to give, I am glad to say, is not quite so unfortunate as that of Professor Dobson. I am sure that the Ph.D. has done good service to the cause of learning from the beginning, and I should say that the number of these people who come for it merely for the sake of getting a doctorate is comparatively negligible—at any rate it is in the case of history. We have always been fortunate in London, for the last generation or so, in having had a research degree which has been fairly well recognized—the M.A. For that degree, it has been necessary for several years to submit a thesis embodying the results of original work, and the examination of that thesis with a small amount of paper work has enabled the examiners to decide whether to give a degree or not.

We were, therefore, in the position that we had to find a place for the Ph.D. which was not derogatory to the degree of M.A., to which we attached importance. We have also the higher degree of D.Lit., and had to fit in the Ph.D. somewhere between the M.A. and D.Lit., and we have to some extent achieved this.

Of the candidates who come to us a little more than half come from the Colleges of the University of London, and it has now become more and more the case that those people who have taken a good Honours degree in history in the University come to go on with a certain amount of research. Most of them go in for the M.A., and it has become more and more the case in the big schools of London and surrounding areas that the specialist teachers possess a research degree. To them are added about a quarter of the whole, or perhaps one-sixth, who

come from other British Universities; another sixth from the other Universities of the Empire; and a third sixth from American Universities. In most cases those students who come from the American Universities come to undertake research but are not candidates for our degrees. In almost every case the American students working under me are going ultimately to present their thesis for Ph.D. at their own University, and this for a definite reason. If they present it at their own University in the States, they have a contact with the American educational world which facilitates their appointment to an American College when they get home. At the present time the London Ph.D. is not fully recognized or understood in the States, and it is best for an American student to take a Ph.D. at his own University.

In the case of Dominion students, that is not so. They either go in for our M.A. or Ph.D.

To turn for a moment to show the relation between these two degrees. Each of them involves two years' work as a minimum. Two years for the M.A. is the regular rule, but this period for the Ph.D. is not so common. Almost always three years are taken before the Ph.D. can be obtained. For the M.A. the two years are spent in the same way, but on a comparatively narrow field of research on a subject of a definite character, producing a dissertation which can ultimately be published as an article in a historical Review, and such a piece of work is recognized as being the type of thing required, and the training of that man as being such as will fit him for and bring him sufficiently into contact with the minds of those who are working at pioneer tasks in the fields of history, so as to enable him to realize that something which will bring him into contact with history lies at the back of the dreary textbooks he will have to teach from.

In the Ph.D. degree we demand something more. We require not only that the person shall work on a narrow piece of historical investigation under strict training and so as to get experience of technique, but that in addition he shall make a contribution that is worth while. It must be properly presented in its own literary form and be actually ready for publication; the M.A. thesis needs working up before publication, but the other must be in a form suitable for publication. Our numbers of Ph.D. degrees have been comparatively small. Our standard is pretty high. But in almost all cases the successful dissertations have been published, or are about to be published, not because we insisted on the printing, as some Universities do, but because

publishers are ready to accept the books, or because, with a certain amount of subvention, we can get them published in a series of historical publications.

The magnitude of the piece of work for the M.A. and Ph.D. is somewhat different, and we are demanding a higher quality of mind from a man who is to get the Ph.D. As a matter of fact, it is now becoming more and more the case in my subject that people take the M.A. on the way to the Ph.D.; that is to say, they work over a definite part of the subject, become familiar with that, present it in a tentative form, and proceed for a definite period to work it up into a larger piece of research which ultimately may be published in book form. We encourage that because it produces good results. If a student takes two years for the M.A. and goes on for a third year studying for the Ph.D., he is a more thoroughly trained student. I think it is necessary, certainly in our subject, to insist on a high standard of attainment for the first degree before allowing a man to become a candidate for the Ph.D. It is not the case with the majority of subjects in the University of London, but for history for nearly twenty years back we have insisted that a man must attain the standard of first or second class Honours before becoming a candidate at all. We insist on that with students coming from abroad, whether from the Dominions or from foreign countries. We do not insist on a student's taking London Honours. We accept a first or second class Honours certificate in history from any University whose standard we know to be approximately equal to our own. This ensures that the candidate has made a general survey of the field of historical knowledge, and it gives him a sufficiently equipped mind to be able to undertake research in a narrow field with profit.

We often cause some heart-burning among students from Dominion Universities. I remember a hard case of a girl from a Canadian University who, by reason of the fact that she had only taken a Pass Degree in her University (there were no Honours), had spent a great deal of time dealing with other subjects. By reason of the spreading out of her course she had not a sufficient background of historical knowledge to undertake research. She had to take a year to qualify herself before entering on a research course. It did much good to the girl, but undoubtedly it was much disliked by the President of the University from which she came, and it was only after personal explanation that he understood why that requirement was established.

Three requirements seem to me to be necessary to ensure satisfactory results:

- (1) A high standard of attainment before the research course can be undertaken. That requirement must not be departed from.
- (2) An M.A. or some degree of a similar kind like B.Litt. or M.Litt. to make definite recognition of some work in research up to a particular standard.
- (3) A third research degree (*i.e.* Ph.D. or D.Phil.) to carry that work on and make it a real contribution to the subject.

Then, higher than that, for the recognition of the mature achievement of a man who has joined the ranks of the scholars, let us have the D.Lit., which ought only to be given after a man has given evidence of real attainment in the world of scholarship. Then your degrees will be set forth in such a way as to give not only to us, but to the outsider the knowledge of the attainment attached to the particular sort of degree that each man holds.

I am strongly in favour of the Ph.D. degree as it has worked out up to the present, and I hope it will go on to further utility in the future.

SIR GREGORY FOSTER (London): I will begin by endeavouring to give you in a very brief form the general results of the institution of the Ph.D. in the University of London.

The Ph.D. degree was instituted in 1920, and the earliest date from which students were allowed to be registered for this degree was January 1919. The total number of applicants for registration as internal students for the Ph.D. degree since the institution of the degree—to the end of last session—has been over 600: of these, 275 have presented theses and have been examined. I should like to call the attention of the Congress to the requirement that the candidate for registration must specify the subjects relevant thereto in which he will offer himself for examination. Of the 275 candidates presenting themselves for examination 221 obtained the Ph.D. degree.

The majority of the students are from Universities in Great Britain and Ireland, and naturally the largest number of applications are from students who have taken first degrees in the University of London. Outside Great Britain India has provided the largest number of candidates, and next in order of number come the United States of America, and then Australia and New Zealand. A few students have been admitted from European Universities, from Canada, and from South Africa.

With regard to subjects, the largest number has been in the Faculty of Science: 179 presented themselves for the Ph.D. in Science, the largest number being in chemistry—of these, 155 obtained the degree. In the Faculty of Arts there were 58, of whom 37 obtained a degree; the greater number in that faculty took English language and literature. There were 24 in Economics, 19 of whom obtained a degree. In Engineering there were 7, of whom 5 were successful. In Theology there were 7, 5 of whom obtained a degree. London gives the Ph.D. degree in those five faculties.

It is very difficult, in the experimental stage of a great scheme like that for the Ph.D. degree, to express general views, but I think, on the whole, we should say in London that we are satisfied that the institution of the Ph.D. has accomplished many of the purposes for which it was established.

It was established, for instance, as a link of Empire, and I have no doubt whatever that it has strengthened our links with the various parts of the Empire. It was established as a general world University system, and there again, I think, it has accomplished its purpose to some extent.

On the point raised by Professor Dobson, that formerly, before the Ph.D. was instituted, men came to work under this or that distinguished man—our experience is that that class of man has not diminished in number. We still have a very large number of men who come from different parts of the world to work under distinguished professors, but they do not trouble themselves about any degree at all. With some of them it is because they can only stay a year, but a great many stay more than the two years and still do not trouble themselves about a degree.

There is no doubt that among the difficulties we had to encounter in London the greatest was to draw a distinction between the old-established M.A. of London and the new Ph.D. I am not sure that that has been fully done yet.

Professor Newton has indicated the direction in which we are moving. The training course for the M.A., like the training course for the Ph.D., is a course of training in methods of research. In some branches in London at the present time the M.A. thesis need not be a new contribution to learning; it may be an ordered exposition of existing knowledge on any problem, and that is true also of the M.Sc., whereas the thesis for the Ph.D. must form a definite contribution to the knowledge of the subject, must afford evidence of originality, shown either by the discovery of new facts or by the exercise of independent

critical power. For the Ph.D. thesis on the internal side, the side concerned with teaching and which, therefore, insists, for the purpose of the Ph.D., on supervision, we do not accept a thesis which is joint work except in so far as the thesis is joint work with the supervisor. On the external side, where supervision is not required and where the test of thesis and of examination only prevails, joint work is accepted.

There is one other point which perhaps I might mention. It was felt that the institution of the Ph.D. would inevitably result in a diminution in the number of students taking Master's degrees. That has not been the case. On the contrary, since the introduction of the Ph.D. degree the number of students taking the M.A. and M.Sc. degrees has increased. In 1920 there were 25 candidates for the M.Sc.; in 1921 there were 37; in 1922 there were 70; and in 1923, 69. Of those something like one-third have gone on, or are going on, to the Ph.D. degree. With regard to the M.A. degree the tale is much the same. In 1920 there were 25 candidates; in 1921, 31; in 1922, 41; and in 1923, 42.

There is one other point to which allusion has been made. We have inevitably in London part-time and full-time students. The part-time student is invariably either a graduate of our own or a graduate from a home University; that is to say, he is one who has occupation during some part of the day. The student from the Dominions and from the foreign University is, I think, invariably a full-time student; it is satisfactory to find that he really does take a part in the life of the College to which he is attached. One of the things which has contributed to that and has made it easier than it might otherwise be is that the Ph.D. student, while his main work is that of his thesis, has also to take those other subjects which are relevant to his thesis, which bring him into contact with other members of the staff and with other departments; he thus more readily finds his place in the general community life of the college.

I mentioned just now that, as far as subjects go, the main subject in Science has been chemistry; next to that comes Economics, then English, and then Physics. After those subjects the variety is extraordinarily great. We have had Aeronautics; there have been three Ph.D. theses on Bantu languages; Helminthology; History of Science; Pekinese; Puranic literature; Slavonic studies; Spectroscopy.

I think that I have, in a very brief way, covered our London experience. We still feel that the Ph.D. is in an experimental stage, but we feel that our experiments so far have fully justified

its introduction. The difficulties have been great, but they are being overcome, and we should see with regret any movement towards its abolition.

PROFESSOR WEISS (Manchester): I do not propose to give you the experience of the Ph.D. degree so far as the Manchester University is concerned. All I can say is that we have had our share of Ph.D. candidates and, as far as we are concerned, we still consider it to be in an experimental stage. But I should like to make some remarks with regard to opinions expressed during the past few years by members of the Association of University Teachers, of which I have acted as President, and which has had a committee sitting on this and other higher degrees during the last three years. A report has been issued, of which I have distributed a few copies.

At the meetings of the Association of University Teachers grave doubts were expressed similar to those voiced by Professor Dobson as to the expediency and success of the institution of this degree. There were everywhere at the outset a good many opponents, and in some of the provincial Universities the majority of the teaching staff are still opposed to the institution of this degree and do not think it is acting, as far as they are concerned, in the manner in which it was supposed to act.

Let me say in the first place that, as regards the amount of research being done in this country and of which the opener of the discussion instanced the good effect in this University, I believe with Professor Dobson that research would have gone on increasing from its pre-War stage, even without the institution of the degree, because nothing was more remarkable during the War than the enormous impression made on the public, on the Government, and on educational institutions of the importance of research work in Science and other subjects. The growth of research, fostered by the Committee of Industrial and Scientific Research in the sciences, and by other institutions in the Art subjects, would have gone on without the institution of this degree. So we cannot attribute the increase to the introduction of the Ph.D. alone.

That certain people have been attracted to research with the object of getting the degree of Ph.D. might be said also of the M.A. or of any other research degree. But those who were concerned in its institution, and were sceptical about the results, have been disappointed in the number of students received, at any rate in the smaller Universities, from abroad, America and the Dominions, and consequently by the fear that it might

debase either the higher Doctorates or might have an injurious effect on the M.A. and M.Sc. in those cases where it is taken by research.

In Cambridge the conditions were different. The M.Sc., I gathered from the opener, went alongside the Ph.D. as a sort of sink in which to place those who failed to get the Ph.D. That was the impression his remarks made, and that is exactly what we were afraid of in other Universities, where the M.A. and M.Sc. would not be taken by research, but that the students would proceed immediately to the Ph.D., and we should have either no further candidates for the M.A. or that that degree would be one of very little value.

I was glad to hear what Dr Newton said, and that is a point on which we ought to insist, that the Ph.D. must be kept at a very high standard and not be allowed to replace the M.A. or M.Sc. by research, but be taken as a further step; and the report which the Association of University Teachers has drawn up on this matter endeavours, while not condemning the Ph.D., to place the degrees in such sequence that there will be a definite standard for each degree, which will become familiar to those who are concerned with appointments, or those who are advising students to go to one or other University.

The idea is that every student having taken an Honours or Pass degree should present himself for an M.A. or M.Sc. before proceeding to the Ph.D., or give evidence that he has attained a standard which has given him the technique of investigation. When he begins his Ph.D. course he has those fundamentals on which to work. That is, I think, the point we want to insist upon, that the Ph.D. degree should be the second research degree rather than the first, differentiated from the higher research degrees such as the D.Sc. and D.Litt., which would be awarded for continuous research over a considerable period of time. If that is done, we may say it is worth while continuing with the Ph.D. degree. But I should like to appeal to the representatives from overseas to give us their views on this matter, because the Ph.D. degree was really instituted rather for the benefit of their students than our own. If, as we have seen, even in Cambridge, it has become the custom to give it to a larger number of their own students than those from overseas, I appeal to them to say if there is anything in the regulations which they would criticize, and which has perhaps caused students from the Dominions not to take the Ph.D. I would also like to urge that they should institute, as I see from the report of Professor Klink they are instituting, in some of the overseas Universities graduate courses

in which the M.A. or M.Sc. may be given before the students come to this country to take the Ph.D.

If that were done, there should not be any difficulty in candidates taking the Ph.D. in two years. With the safeguard of this preliminary M.A. course they will be welcomed and enter at once the courses instituted for the Ph.D. degree.

The Association of University Teachers is also very anxious that in England itself there should be a freer interchange of students for research purposes than has been the case in the past. Some of the Universities were anxious that the Ph.D. should be given only to students of another University and not of the one which gives the courses. I understand that the Institute for Historical Research is of a specialized kind which would necessarily attract to London from other provincial Universities. But I think on the whole, as between Manchester and Liverpool, say, we should welcome interchange. Students would get a wider outlook and more stimulus and would benefit both themselves and the Universities which they visit. This applies both to overseas and British Universities.

THE REV. T. CORCORAN (National University of Ireland): I think it is a mistake to attempt in any University to put up an advanced degree for research and say: "This is meant especially for other than our own students." If a University is not able to produce work of a substantive character done by its own people, it has no business to invite others in. It attempts to put a brand on the degree as being for the expert only. Hence I think it well to put before you what has not, I think, been set out as yet—a single-handed, or two-handed, attempt to provide a process of such research training or development on a natural or local basis and which, perhaps, might be of some interest to you to hear.

This is in the field of education, an immense field which no five professors of the subject could cover for research purposes. Hence any organizer of research must limit the effort, both with regard to himself and the students, into one definite line. I take, therefore, the history of education, which affords splendid material for the training of a large number of practical workers in matter collateral to their professional duties, and able to inspire these professional duties with that character of research and scholarship which is so necessary.

There is no greater contrast between the secondary teacher in France and Germany on the one side, and in this country and America on the other, than this fact that an immense amount

of research output and scholarly work of the best character has been produced for eighty years in France and Germany by secondary teachers. Fully half of the professorial staff in the Universities, both in France and Germany, has been drawn from persons with long and successful secondary experience. That gives a dignity to the teaching profession as a whole which is not secured in English-speaking countries. It is necessary to have the teacher inspired with the spirit of research, even though he may be engaged in secondary or primary work. For that purpose, and having to deal with a small college, I hope that some of you from overseas will remember that one of the most famous pleas for professional independence, even of State control, was embodied in a speech made on behalf of a small college by Webster, when pleading for Dartmouth College. A great deal of work may be done to secure the highest measure of real research under the Ph.D. scheme by a limited department.

In Dublin we have a graduate school for education. The number of students in the College, all told, in all faculties, is about 1200. There is a Ph.D. system working very well in Science. One of the Ph.D. students quite recently, having taken an M.Sc. by research and then Ph.D. by research, went over to Europe, entered a great firm as a practical apprentice, and in twelve months, single-handed, had brought that great firm into the Shannon electrical scheme.

Now, to turn to my own humbler field of literary research. In that I should have about seventy-five graduates from different faculties preparing to be teachers, primary and secondary, and of these perhaps 70 per cent. will get through. How many of these will be able to conduct research? Extremely few. Will they be found mainly or exclusively among first-class students? That is not my experience. The quality of good research can be found very often even in the second class of these students, and, occasionally, even among those who, perhaps from want of early opportunity, do not succeed in taking an Honours degree at all. I have found first-rate quality in that respect even in the case of those who do not figure in the Honours lists of degree courses. But between the general preliminary, the general professional year of study, and the Ph.D. it is necessary to insert a sifting process. I do that by the M.A. degree, which is primarily limited to historical study. It should be focussed. A professor must limit his activities. After going through a course of Plato, and a course based on the original sources of Renaissance documents of the fifteenth and sixteenth centuries, and after having shown power to handle these, only when they

have a good quality M.A. degree on these lines would I admit a student to become, at the end of the fifth University year, a Ph.D. candidate. The sifting process must be thorough. Of the seventy-five average class of graduates in three faculties—Arts, Science, Commerce—about fifteen are competent to proceed to M.A., and of these some four or five are of a disposition to proceed to the research work for the Ph.D.

Here again the limiting process must operate. It is vital that the main subject taken should be one for all students. It should have many facets and regular first-hand handling of materials. In Dublin one of our characteristic subjects is the Renaissance scholars. We have a library which was opened in the year 1710 and is still a public library, the earliest public library in these countries; and we have magnificent material on the important European controversies bearing on education. Take the Renaissance field. When you have four or five students dealing with it round the table, it is quite possible for the professor to do what he should do—take an oar in his hand himself. In no other way but by conducting a piece of research *with* the students will you get the best results.

It would not be well, even in a limited institution like mine, to limit yourself to one single topic. We have in Dublin, fortunately, an immense quantity of resources on the history of education in Ireland which is still unsifted. There is no subject more unsifted than the history of education. Mr Leach, addressing the Academy, said the history of education has never been written in England, and the same is true of France. Hence, dating from 1700 to 1850, there is a splendid opportunity of getting the Irish teacher conversant with the subject of education, and they are required to put in a minimum of three years. The best worker is the teacher who is at work. I do not believe in keeping brilliant students hanging round Universities for years. They should get to their life-work. Consequently, with the part-time workers the right plan is to give ample time to any specific research. Let them come in once a week and sit round the table to discuss the common problem, contribute to others' work, get suggestions from the professor, contribute suggestions on his area of the work, and so co-operate—a principle which is vital to real research. Unless the spirit of co-operation is produced the process will not succeed. I believe, therefore, that with definite organization in a small way, with small resources, but utilizing all local opportunities, a good deal can be done to give that organized training in the methods of research in history which is so vital to the problem.

I have heard much of the administrative side, but would like to hear the experience of other individual teachers or organizers of how they have organized the work. That side is lacking in the documents and in the ample addresses we have heard this morning.

PROFESSOR HOLME (Sydney): I do not want to take up the time of the Congress but, in answer to a previous speaker, I have never heard in Australia any criticism of the Ph.D. regulations as they exist at Cambridge. In fact, I have often heard that they are a model of what such regulations should be.

MR MAHAJANI (Student Representative, India): I only want to ask one question of Professor Newton or Sir Gregory Foster, and, incidentally, a question of Mr Priestley. We are told that the main direction in which the University of London is moving at the present moment is to keep the standard of the Ph.D. somewhere between the standard required for the old M.A. and the higher degree of D.Sc. Secondly, that the dissertations submitted for the Ph.D. are required to be original contributions to the knowledge of the subject at that time, whereas a candidate submitting his thesis for an M.A. degree need not make any original contribution but may simply present an ordered exposition of the knowledge which already exists.

There may be cases in which the candidate may think that he is making an original contribution, whereas he is but putting together a record of things already known. Has it ever happened that when a candidate does not reach the prescribed level a degree is given automatically? Many of the candidates are not clear on that point, and anyone who is doing research work would like to know.

With regard to the M.Sc. and Ph.D. of Cambridge, it is not clear from the regulations that the M.Sc. does not require original work. Anyone who applies for an M.Sc. should state what portions of his dissertation he claims as original. Would Mr Priestley say, if anyone in my position submits a thesis for the M.Sc. and expresses an intention of following it up for the Ph.D. degree, should the examiners not think him qualified, would they automatically give him the M.Sc. degree?

MR PRIESTLEY: The M.Sc. degree in Cambridge does connote original work, but work which has taken two years only to carry out. That, I think, was rather an unfair remark about the M.Sc. being used for a sink. When someone is endeavouring

to make a point, part of the context is often picked out without regard to modifying statements elsewhere in a speech. I distinctly said that the M.Sc. was intended for two purposes, and first and foremost for those who are unable to afford to carry out the whole of the three years of supervised research required for the Ph.D. degree. At Cambridge this is the main reason for the M.Sc. and the M.Litt. It is true and unfortunate that it is a necessary consequence of the relation of the M.Sc. and Ph.D. that some who fail for the latter should be allowed the former. A man who has not quite reached the required standard for the higher degree might otherwise spend three years in Cambridge and add nothing at all to his qualifications. Often his work is good enough for the M.Sc. or M.Litt. degree, and it is a fact that the M.Sc. and M.Litt. have been given, rightly I believe, to such men.

The second question of Mr Mahajani is answered by what I have already said. It does not follow that a man who cannot take the Ph.D. will be recommended for the M.Sc.

FACILITIES FOR RESEARCH IN MCGILL UNIVERSITY.

RESEARCH at McGill is very largely controlled by the Faculty of Graduate Study and Research, composed of the Heads of those Departments in which active research is being carried on. The following Departments are prepared to give instruction in carrying on research leading to the degree of Ph.D.:—Bacteriology, Botany, Biochemistry, Chemistry, Pharmacology, Physics, Physiology, and Oriental Languages.

Bacteriology.—Research is conducted: (1) in Laboratories at Macdonald College, specializing in dairy, food, and agricultural bacteriology; (2) in the Department of Hygiene, in relation to public health; and (3) in the Pathological Institute, in relation to Pathology.

Botany.—A large greenhouse with attached laboratory is used for Plant Physiology. An optical room, a sterilizing room, and a chemical laboratory all afford space for a few research workers. The laboratory is particularly well equipped with microscopes, cameras, ultraviolet illuminators, specially arranged for motion photomicrography and other motion-pictures. Excellent equipment for ultraviolet microscopy is provided.

Plant Pathology.—Greenhouses and field spaces are amply provided. Special work is now being carried on in virus diseases, smut in cereal crops, rust in oats, and bean diseases.

Biological Chemistry.—There is ample apparatus and laboratory space for at least ten research students. Courses of advanced lectures, about one hundred annually, having a special bearing on the problems under investigation, are given.

Chemistry.—Seven professors take part in the direction of research, especially in the fields of organic and physical chemistry. For investigations into the chemistry of rubber there is special equipment such as cannot be found in other Universities on this continent or Great Britain. Important investigations have recently been carried on in connexion with the use of hydrogen peroxide in organic chemistry. The department possesses exceptionally good library facilities and carries on co-operative work on the chemical aspects of pharmacology and bacteriology. A new Chair has been established in Industrial and Cellulose Chemistry, in which excellent facilities are offered for work on

the constitution of cellulose, lignin, etc. Work will be undertaken on the syntheses and properties of artificial silks and the study of colloidal properties of cellulose and related derivatives. In co-operation with the Departments of Physics and Botany, facilities will be given for the investigation of the fibres by X-ray analysis and for the study of the botanical side of fibres.

Physical Chemistry.—The underlying object of most of the lines of research in Physical Chemistry at McGill is an investigation of the nature and magnitude of molecular forces, and a large number of specific investigations have been linked up from that point of view, such as an accurate determination of pressure, volume, temperature relation of gaseous systems; ranges of temperature from -100° to 250° have been covered. New experimental technique has been developed, and a new form of gas law established which makes it possible to distinguish between the volume and the molecular force effects and deviations from the ideal gas law. Freezing-point curves, the velocity of reactions, specific and latent heats of fusion, physical constants of related compounds have been measured with the highest degree of accuracy. Pure hydrogen peroxide was prepared for the first time in this laboratory. The number of students who can be taken is limited to four or five.

Agricultural Chemistry.—Laboratories are well provided with the latest apparatus for exact measurements. The library has full sets of journals and bulletins of the various agricultural stations in the United States and England. Ample opportunity is afforded for the correlation of field-work with the work of the laboratory.

Pharmacology.—Four large, well-lighted rooms are available for research. In addition there are three smaller rooms for special purposes and a room for keeping experimental animals. Besides ordinary and minor equipment, the laboratory possesses the following:—Automatic refrigerator, constant-temperature room, metabolism cages, electrometric hydrogen ion outfit, sterilizer, vacuum oven, drying oven and incubator, three Brodie operating-tables, pump for artificial respiration, large centrifuge, shaking-machine, combustion apparatus for organic analysis, polariscope, spectroscope (constant-deviation type), vacuum pump, pump for organ perfusions, water thermostat, refractometer (Abbe), colorimeters (Duboscq and Bürker), du Nöuy tensiometer, analytical balances, two long paper kymographs, a good supply of certified glassware, a wide range of chemical materials, and a small though important collection of books and periodicals. On the whole, the laboratory is especially well

equipped for those problems of pharmacology requiring a predominantly chemical method of approach.

Physics.—Post-graduate courses and special studies are carried out by seven professors, giving graduate instruction. Besides the regular apparatus required for advanced instruction in Physics, there is special equipment in use for the Stark effect, X-ray analysis, radioactivity, and electrical measurements; and in the optical laboratory Hilger's most recent instruments are available.

Physiology.—A large expenditure has recently been made on research equipment. The department is closely associated with that of Experimental Medicine. Space is available for 12 or 13 full-time workers.

Oriental Languages and Literature.—The department affords means of investigating the almost wholly unworked field of Hebrew and Semitic social and cultural anthropology, the data for which are embodied in profusion in Semitic texts readily accessible in large collections—data of social structure, forms of marriage, terms of social relationship, the comparison of racial characters, correlated with cultural peculiarities, the peculiar arithmetical theories of unity showing the existence of arithmetical processes belonging to very early stages in evolution in the art of counting. The native Indians in the country are typical of living backward cultures and have provided important clues to the principles of early stages of Semitic anthropology.

Departments in which provision for research is made and instruction is given leading to the Master's degree in Science or Arts.

Agronomy.—Special research work is offered in connexion with Plant Breeding, as well as more advanced work in connexion with the breeding of forage and grain crops. Studies may be undertaken at any season of the year.

Anatomy.—Special courses and opportunities for research in Ophthalmology, Otolaryngology, and Physical Anthropology. Abundant material for the study of normal and variant human anatomy, X-ray apparatus, a good museum and departmental library are available; also Histology and Embryology.

Civil Engineering.—(1) The Materials Laboratory offers facilities for research in the elastic and other physical properties of all the usual materials of engineering, including timber, cement, concrete, ferrous and non-ferrous metals and alloys; the unusually comprehensive equipment of extensometers and strain gauges, as well as the technique developed by members

of the staff through many years of extensive experience, make the facilities exceptionally good for research work in connexion with the stress distribution in simple and built-up structural elements and members. (2) The Highways Laboratory—equipment and materials for highway construction. (3) The Hydraulics Laboratory—flow of water and characteristic behaviour of pumping machinery and hydraulic turbines.

Economics and Political Science.—The work is devoted to advanced study in Canadian economics and national problems which arise in connexion with Canadian commerce, industry, and finance. A special feature is the publication of monographs dealing with the great political problems of Canada. These are based upon the theses prepared in the School, revised and adapted for publication. Four *Fellowships* are available for graduates in this department who wish to proceed to advanced study, two at \$500 and two at \$800. Montreal is the greatest commercial centre in Canada, and through the kindness of leading banks, two great railroads, the Harbour Commission, and the great industrial firms, opportunities are afforded which cannot be obtained elsewhere. The department is also in close touch with the various Government offices, and especially the Dominion Bureau of Statistics.

Electrical Engineering.—Completely equipped with the latest forms of apparatus for measuring and designing potential transformers up to 3000 amperes, 60,000 volts. A high-voltage laboratory is equipped with testing transformers from 20,000 volts to 250,000. Photometric laboratory available for the study of light sources and investigation of the cause and elimination of radio interference.

Geology.—A number of graduate students are preparing for the degrees of M.Sc. and Ph.D. About thirty miles from Montreal Palæozoic Rocks of the St Lawrence Lowlands are resting on the margin of the old pre-Cambrian continent, and a great variety of rocks, both igneous and elementary, offer unexcelled opportunities for the study of pre-Cambrian geology.

History.—Courses of historical methods and criticism. The historical section of the University Library is well equipped, and especially so for all periods of Canadian History. In Montreal there are three public libraries, containing printed manuscripts. Some of the older religious institutes possess records which have never been printed, which would probably repay investigation. For historical research Montreal is more favourably situated than any other city in Canada.

Hygiene.—Problems relating to environment affected by

extremes of climatic conditions present a fruitful field for research. The D.P.H. is open for medical graduates of one year's standing. Special courses are offered for Medical Officers, Inspectors of Schools, and for Industrial Medicine.

Germanic Languages and Literature.—A research library, for which a grant has recently been given, includes a Heine collection, almost complete; sufficiently so for serious research.

Mining and Metallurgy.—The equipment includes a great variety of crushers, mills, special screens, concentrators, flotation machines, cyanidation, etc. Associated with the laboratories containing these machines are mechanical and assay laboratories and a variety of accessory equipment. Metallurgical laboratories will accommodate three or four research students. Laboratories are equipped with electrical furnace with automatic temperature control, pyrometric equipment, apparatus for the production, analysis, and use of gases, and well supplied with metallographic equipment for the preparation, microscopic examination, and photography of metals and alloys, etc.

Pathology.—The Pathological Institute occupies a self-contained three-floor building, with a basement, very conveniently situated as regards its proximity to the Royal Victoria Hospital and to other McGill buildings. Its material is derived from the R.V. Hospital, the Montreal Maternity, and the Alexandra Hospital for Contagious Diseases. It has a large well-equipped museum and preparation workshop, and special laboratories for reconstruction work of pathological organs through injection. It offers facilities for graduate students, especially along lines of pathological morphology; also accommodations for experimental animal work; a large animal operating-room and an animal house are attached. Special research rooms for individual workers. Similar accommodation for the Bacteriological Division, which is incorporated in the Pathological Institute. Emphasis in this department is laid on the pathogenic side, while sanitary and agricultural bacteriology are treated by other departments.

Philosophy.—There is a fairly complete philosophical library, with files of the leading British and foreign periodicals. There is also a well-equipped and now independent Psychological Department. Instruction in the graduate school is at present limited to training students for the degree of M.A. After a year at McGill the graduate students generally go to one of the large schools in the United States for their Doctor's degree.

Psychology.—The library is fully adequate for studies up to the doctorate. The new psychological laboratory, which will be

completed for next session, will afford facilities for advanced research and all aspects of the science. It will be superior to others in Canada, and quite equal to the best in the Empire.

Romance Languages.—Post-graduate courses and special studies in French are offered. Very special facilities, owing to location in the very heart of French Canada, give students coming to McGill for graduate work the advantage of a population which is two-thirds French; where French theatres and French newspapers interpret the trend and significance of French culture and thought. All lectures in the French Department are given in French, no English is spoken in any French class. The staff is composed entirely of native French lecturers. French libraries of the City are very complete and contain works of great historical value. The M.A. in French from McGill represents a degree of attainment and excellence recognized all over the American continent.

Zoology.—McGill is tacitly affiliated with the Biological Board of Canada, and many of the graduate students carry on research at the Biological Stations at St Andrews, Halifax, and on the Pacific Coast, where no fees are charged. Research in Entomology is very largely carried out with the co-operation of Macdonald College. The forms of aquatic life found in the Great Lakes are similar, although not identical, with those found in Europe at corresponding latitudes. At present instruction is only given as far as the requirements for the M.A.

Medicine.—There has been established recently a University Medical Clinic at the Royal Victoria Hospital, with laboratory facilities equal to those of the best institutions on the continent. In addition to the Director and his clinical staff, there are a number of men on full time who have specialised already as research scholars in clinical and laboratory aspects of Internal Medicine. Attached to the staff are a biophysicist and a biochemist on a full-time basis, and a number of technicians. In these laboratories there is a ward of fourteen beds specially arranged for investigative purposes in so far as diet and other essential controls are concerned. The equipment is in every way modern, with individual laboratories for research students and graduates. The cases for special investigation are recruited from the general medical wards, which are also under the control of the department. At the Montreal General Hospital there is an equally well-equipped laboratory for conducting research in various branches of Clinical Medicine. This laboratory, too, is in charge of a full-time physician, whose work is devoted entirely to the

laboratory aspects of the research. Close co-operation exists likewise between these two laboratories and the other laboratories of the University, enabling students to do research from practically every scientific standpoint.

*[From Report of the Dean of the Faculty of Graduate
Study and Research, May 1926.]*

FRIDAY, JULY 16—Afternoon Session

CHAIRMAN:

THE RIGHT HON. THE VISCOUNT HALDANE OF CLOAN, O.M.,
K.T., D.C.L., LL.D., F.R.S., CHANCELLOR OF THE UNIVERSITY
OF BRISTOL.

“The Desirability of Articulating other Pension Schemes with
the Federated Superannuation System of Great Britain
and Ireland.”

EIGHTH SESSION.

THE CHAIRMAN: On the face of it this looks a trite business subject, but, as the late Professor Tyndall said on a famous occasion, it has in it the presence and potency of life. Underneath the question of pensions—of pensions consolidated into a complete University system, by which a professor with pension rights may be transferred to another University and not lose them—there is concealed a very large idea.

We all know that elementary and even secondary education have necessarily something local about them. They take on the colour and the atmosphere of the country in which they are given. But when you come to the higher forms of education it is, in material respects, otherwise. No doubt every University has its own atmosphere, and long may it continue to be so; yet the highest learning, with which the Universities deal in common, has less and less of frontier delimitation. It was not always so. There was a time when the Universities had their distinct national tendencies. I have in my mind the great University under the auspices of which we are assembled, and another University where I lived as a student, have been since, and know well—I mean Cambridge and Göttingen, both of them tremendous schools of Mathematics, probably the greatest the modern world, at all events, has seen—and in each of them there was a long series of very distinguished teachers, of great minds—minds like those of Newton and, to mention only one without prejudice to others, Cayley, who embodied what became the Cambridge tradition, a tradition largely expressed in their teaching. Then, if you cross the German Ocean to Göttingen, you find a mind second only to that of Newton, Karl Friedrich Gauss, the greatest mathematician of his time in Germany. He was succeeded after a brief interval by Riemann, a genius, who was succeeded by a number of eminent men such as Minkowski, Klein, and to-day Hilbert. These are a few of the names of the series.

Göttingen and Cambridge not only had two series of great men, but they were great men with different outlooks. The mathematics of Riemann were mathematics of a very different tone and outlook from the mathematics of Cambridge just at that period; but presently, because the highest science knows no frontiers, Cambridge and Göttingen teaching came into harmony, and now the doctrines at Göttingen are well known at Cambridge and the doctrines of Cambridge are equally well known at Göttingen. In that way the teachers have come

into a known country and to some extent may be said to co-operate.

I have mentioned Mathematics because it was an obvious subject to mention. I will take another which I know more intimately, the subject of Philosophy. Now the teaching of Philosophy is always popularly represented as teaching in which is given just the peculiar outlook of the teachers—individuals who are supposed to grow up and pass away like flowers of the field and perish, to give place each to another flower of a different kind which takes its place. And yet this is a superficial view. The more you study Philosophy, the more widely and carefully you read it, the more you find that what is common to all the great systems is more notable than what distinguishes them. You may be a new realist or a subjective idealist, but, if you look closely enough, you find the basis which underlies both, and in that basis and its permanence in various forms in the different systems of Philosophy since the beginning of time, you find the real systems of truth and of thought.

That is an illustration of how good a thing it is that teachers of this great subject should be brought together and should consider themselves as members of a single corps. Differ they always will. The teaching will turn in large measure on the individuality of the professor, but yet, if he is great enough, underneath his teaching will be found that common basis which he has inherited from his own great predecessors, and which he is transmitting with the additions and changes he has made in it, but yet the same great tradition which he inherited.

But it is not necessary to look only at such vast subjects as Mathematics and Philosophy. Take another subject which may be taught and is taught differently in the different Universities of the world, and which yet could be brought on to a much more common footing to-day. What comes into my head is Architecture. Architecture is treated as if it were a technical science, but it is much more than that. Those of you who have read it will appreciate the extraordinary subtleness with which Schopenhauer—a very great man whether you agree with his teaching or not—wrote on Architecture in its relation to the sublime, and published it as a supplement to his great work on Reality. Schopenhauer showed that in Architecture, too, you have great principles and a broad basis which links it to the rest of life. Schopenhauer was a man of infinite knowledge, one of the greatest students the world has ever seen, and he furnishes forth in his book the illustrations and authorities with which he enforces his thesis. Architecture, in Schopen-

hauer's opinion, is something that could be taught in the University; and Architecture is now taught in many Universities, and could be taught in such a fashion as to bring out the common principles, so that whether you believe in the Gothic or disbelieve in it you still find underlying it a great contact with life which is what the foremost thinkers about Architecture have sought to bring forward. That could be made the basis of practical teaching of the most valuable kind, because it is highly stimulating to the future architect.

You have been discussing this week in Cambridge the subject of Jurisprudence. Why is it that people in this country are so slow to set up schools of Jurisprudence? We have had great jurists. F. W. Maitland was one of the greatest, and Dicey was another, and Frederick Pollock, and others whom I could mention. But Jurisprudence has never taken a hold in this country. Why? Because the practical lawyer hates it. He hates it with the malice of ignorance because he does not understand it. If he did, he would know that it is impossible for the advocate, who constructs the higher kinds of argument, properly to equip himself without the broad basis of Jurisprudence. It is an academic subject which passes into a second phase when taught practically, but it is permeated through and through with the great principles to which the jurist attaches importance.

I know that a conference such as you have had here will not quickly produce very great results, because you have to convert the sons of the men who founded and moulded the Inns of Court and the Law Society. As it is in these bodies that we wish to teach our students practically, we do not want them to waste time on merely theoretical things. But cases come before the Courts which need Jurisprudence; in the Judicial Committee of the Privy Council all sorts of systems are brought into question. Then the value of Jurisprudence makes itself felt, and your merely practically trained advocate cannot avoid being at a disadvantage in so far as he does not know that the things he speaks of are the superstitions of the English common law which have no basis outside. He does not know because he has not the larger point of view of the trained jurist.

Let us see whether there are any other illustrations to be found of this newer outlook which might be that of teachers in the different Universities of the Empire, because if there is a common outlook, if the teachers can be brought together, however much they differ in details and consequential views, if they can be brought together on first and fundamental principles, it is to the advantage of everybody that they should take

each other's places and move from University to University in order to inspire with this wider outlook the people with whom they are brought in contact.

I think, for instance, that it is particularly desirable that some of our best teachers should go to India, and that India should send some of her best teachers (and she has some very fine ones) over here in order that we may appreciate in its fullness that wealth and genius for certain subjects and points of view which the Oriental mind possesses.

But it is not necessary to go to anything so general. Take Medicine, which is taught all through the Empire and all over the world. Surely it would be an enormous advantage if a great Professor, say from Toronto like Professor Banting, could come over and lecture at Cambridge. He could cast the latest light upon the structure of the pancreas and the islands of Langerhans. Someone who worked in similar fashion at the thyroid gland and its secretions would stimulate very effectively people who were working in that fashion here. Men who are devoting their thoughts and energies and wills to the study of cancer might most usefully come and teach here, we sending out to replace them men eminent in the same subject and, therefore, qualified to take their place. The advantage of that would be the stimulus which it would give to Medicine. The same is true of Surgery. It is a remarkable field in which that stimulus might be employed on a very wide scale. Medicine is a concrete sort of science, and yet it is a science, and its progress must inevitably depend on science.

When you turn to other things—to modern Physics, for instance—to great problems like that of the atom, in which Sir Joseph Thomson (whom I am delighted to see here) is so eminent a pioneer throughout the whole world, when you have questions of that kind to deal with, I say it would be of the utmost stimulus to academic life if our great teachers and their great teachers could exchange posts, if only for a brief time, for the purpose of showing that in the higher learning which knows no frontiers the basis of thought is a common basis, and to establish that contact of mind throughout the world which is the greatest aid in the development of truth.

Not only the realm of modern physics, but the problems of modern relativity might well be treated in this fashion. The mathematicians perplex the philosophers and the philosophers perplex the mathematicians, and no doubt it is true that, if they explain themselves to each other, in the end they do come to a certain amount of agreement. As it is at present, there

is violent disagreement and declarations that they cannot understand each other. Now that is just one of those cases in which, I think, much might be done. Work is going on in this subject, as I know from the papers which come to me from the remote parts of Canada, and it is surprising to hear how attractive it is to small towns in Alberta where the interest which this soul-stirring topic awakens has given rise to very considerable numbers of teachers, and it would be good both for us and the teachers to see something of one another from time to time in order to get further views.

All these things point to the value of assisting in each University teachers within the Empire and out of the Empire to be brought from one centre to another, so that yet they could still feel that they were secure in their pension rights. That is a matter which requires a great deal of working out and may be difficult. It would require uniformity of system and the establishment of standards of security which left nothing to be desired. It would mean, if you got it, that you might summon from Cambridge, or Toronto, or Calcutta some distinguished professor who had made his mark there and fill his place with the corresponding professor from your own centre. If that were done, then I think, not only would it make for the development of the world's learning, but for the development of the world's peace. What we suffer from most is that we do not understand or appreciate each other, and it is from that point of mutual understanding and appreciation that will grow the world's peace.

I am all for making peace by getting at the facts. It is no use to insist violently one way or the other, whether you are a man of science, a miner, or a coal-owner. Anything like obstinacy and not letting yourself understand your competitor's point of view does not prove your case; it leads to obscurity. For that reason in itself I should welcome the advent of a system in which the professors and lecturers were brought together in a common system to enable them to move about with the security that their pension rights would not be injured. I am glad to say we are to be addressed this afternoon by one who has given special study to this subject, and it is possible he may be able to shed some light on the difficulty, which may be not so insuperable as it seems to other people.

Discussion.

MR W. M. GIBBONS (Sheffield, Secretary to the Federated Superannuation for Universities): The subject set down for this afternoon's discussion was, I believe, suggested by the Australian Universities. I am assuming that "other Pension Schemes" referred to are those of the overseas Universities. The representatives of those Universities will doubtless put forward arguments in favour of linking up such Schemes with the Federated Superannuation Scheme for Universities.

If I may be permitted to indicate in a few words what in my view is the chief reason, I should say it is the need for removing an obstacle—sometimes serious—in the way of the free come-and-go of University teachers between Universities of the Empire. I do not refer to the temporary interchange of teachers for a brief period but to the recruiting of permanent Members of Staff by the home Universities from overseas and *vice versa*. It is clearly of educational importance that this give-and-take should be encouraged. But it will be hampered and checked unless Pension Schemes are so interrelated that a teacher can carry with him to one University the pension rights which he has acquired in another. A Professor or Lecturer may well hesitate to move to another University if the migration involves a sacrifice of his accrued pension rights. There are doubtless other reasons why Pension Schemes should be articulated with what I will call for short the Federated Scheme; but I will leave this part of the subject to be developed by others and pass on to a consideration of the difficulties of the present situation and what might and can be done to meet them.

So far as a teacher's transfer from an institution which has adopted the Federated Scheme is concerned, the matter is moderately simple. You are all aware that the benefits under this Scheme are secured in one or both of two ways:

- (a) By means of an Insurance Policy; and
- (b) By means of investments in Trustee Securities.

The benefits are built up by putting aside fifteen per cent. of the teacher's salary each year. Two-thirds of this amount is contributed by the institution and one-third is deducted by the institution from the teacher's salary. The whole of the fifteen per cent. of salary is paid away as a premium on an Insurance Policy or is invested in Trust Funds; or part is dealt with in one way and part in the other. The policy and invested funds are held by the institution for the teacher under the trusts of the Federated

Scheme. When a teacher leaves such an institution, no matter how long or how short his service in it has been, he loses none of his benefits under the Federated Scheme. There is no dissection of the benefits into the part contributed by the University and the part contributed by the teacher himself. He takes the whole amount. If he goes to another institution which has adopted the Federated Scheme, the one institution assigns the benefits to the other, which holds them on the same trusts, and the teacher suffers no loss. As none of the overseas Universities have, so far as I am aware, adopted the Federated Scheme, this is a case which we need not dwell upon. I mention it to make the story of transfer complete. If the teacher goes to an institution which has not adopted the Federated Scheme, it has been the practice to assign the benefits to the teacher; but I believe (although this view will require confirmation by the Central Council of the Federated Scheme) there is no reason why the benefits should not be assigned to the institution if it is prepared to adopt the regulations of the Federated Scheme in respect of such teacher. It would be the duty of an institution undertaking this responsibility to make the annual contribution of not less than ten per cent. of the teacher's salary, to deduct not more than five per cent. from his salary, to apply these amounts in accordance with the provisions of the Scheme, and generally to administer the trusts of the Scheme. Where the institution is not prepared to take over the benefits and administer the terms of the Federated Scheme, the control of his benefits passes to the teacher, and a choice of three courses is open to him. As the benefits under the Federated Scheme are secured in the large majority of cases by Insurance Policies—out of 4200 members 4100 members have chosen this form of benefit—I will for my immediate purpose discuss the benefits in terms of policies.

In the circumstances named the teacher may

- (1) Maintain the policy and pay the whole premium out of his own pocket.
- (2) Convert his policy into a paid-up policy.
- (3) Take a surrender value.

It should be said parenthetically that a policy is converted into a paid-up policy when premiums cease to be paid. It remains in force for at least such proportion of the benefit as the number of annual premiums actually paid bears to the whole number originally payable. Generally the first course imposes too great a burden on the teacher, especially if he has

to contribute to another Superannuation Scheme in the institution which he has newly joined, and the teacher adopts No. 2 or No. 3. In any case the situation is unsatisfactory. The immediate ownership of the benefits vests absolutely in the teacher, and there is the danger that a teacher might in a crisis relieve the temporary stringency in his financial circumstances by drawing upon funds intended for his old age. He could raise a loan on his policy or take a surrender value.

If, then, when a teacher leaves an institution which has adopted the Federated Scheme to go to an overseas University, that University would accept an assignment of the teacher's benefits and continue to provide for his pension by means of Insurance Policies on the lines of the Federated Scheme, the continuity and security of his pension benefits would be assured. A University may be reluctant to do this, on the grounds that it has a scheme of its own, and, for the sake of easy administration, is desirous of including all the members of its staff in one scheme. But owing to the simplicity of the principle of the Federated Scheme, the administration would not be seriously complicated. The importance of the object in view would justify the extra trouble involved, which would be more than compensated for by the great service such an arrangement would render the teacher.

Now we come to the case of transfers which move in the opposite direction, *i.e.* from an overseas University to a home University. Again, where an overseas University has based its pension scheme upon policies and allows a teacher transferring to another University to carry his policy with him, the problem is comparatively easy. A policy taken out under such an overseas scheme may be recognized for the purposes of the Federated Scheme and taken over by the home University on the trusts of the Scheme for the teacher. The legal ownership of the policy vests in the home University, and both continuity and security of pension benefits are attained.

The same applies to the overseas scheme which is based on accumulations of annual contributions at compound interest. On the overseas teacher's removal to a home University the accumulations can be transferred to the home University to be held on the same trusts. They may continue to accumulate in trustee investments or may be applied to the purchase of a single-premium policy. Of course in order that the teacher shall sacrifice nothing of his accrued benefits, it is important that the overseas University shall hand over to the home University *the whole* of the accumulations, *i.e.* both the accumula-

tions of the teacher's contributions and those of the contributions made by the University. I have not information about all the overseas schemes, but from particulars kindly supplied to me by the Universities Bureau it would appear that in two cases when a teacher moves to a home University and joins the Federated Scheme (as he would be required to do) he carries with him only his own contributions *without interest*.

The kind of scheme which presents serious difficulty in the matter of transfer of pension benefits is that which only provides benefits in one of the following contingencies, viz.:

- (a) When the teacher remains in the service of the University where the scheme is in force till the retiring age; or
- (b) When the teacher dies in the service of the University.

I ought to say that I do not know whether there is such a scheme in any overseas University.

It is clear that a scheme of this kind cannot without modification be dovetailed into the Federated Scheme. If one might venture a suggestion, it would be this:—A slight alteration might be made so that a teacher who leaves the University where the scheme is in force in order to join the staff of a home University should receive at the retiring age fixed by the scheme an annuity proportionate to the number of years he has served in the overseas University. Pensions under schemes of this nature are usually calculated on a fraction, say one-sixtieth, of salary for each year of service. So that the teacher who has served five years would receive at the retiring age fixed by the scheme an annuity of five-sixtieths of his annual salary.

But this at best would be merely an improvisation in the eyes of those who are accustomed to the Federated Scheme. One must not be tempted to claim too much for that Scheme. It has won its way to popularity in a remarkable manner, and one hopes that its popularity is not unconnected with its merits. It was established in 1913. To-day it has over 4000 members. It has been adopted by all the Universities and University Colleges in England, Scotland, and Wales. The Oxford and Cambridge Colleges are in process of adopting it—more than a half have already done so.

It has been the policy of the Central Council which administers the Scheme to admit to participation in it Research Associations and the Scientific Staffs of Government Departments—all institutions, if I may call them so, between which and the Universities there is likely to be an interchange of members of staff.

Now let me say a word about the benefits which are available under the Federated Scheme. They fall into two main categories and are provided by means of

- (a) Endowment Policy; and
- (b) Deferred Annuity Policies.

There are various types within each category. Broadly speaking, this Endowment Policy secures a lump sum at retirement or previous death. The teacher who has chosen a Deferred Annuity Policy may take an annuity at retirement or commute it for a lump sum. In case of death before retirement, if the policy is a Deferred Annuity Policy with return of premiums, his legal representatives receive back the premiums paid accumulated at compound interest. Owing to the variety of options offered, the requirements of most cases can be met. The man who considers that if he survives to retiring age he will have enough to live on, but is anxious about his family if he die early, will take an Endowment. He who is more concerned with provision for his old age will take a Deferred Annuity.

This is the briefest possible description of the Scheme; for this does not seem to be the time to enter into details. If I can help any member of Congress by a discussion of further details, my services are at his command.

MR BUTCHART (Aberdeen): While the proposition that every faculty ought to be given for the transfer of a teacher from one University to another, whether that University be in this country or in the Dominions beyond the seas, is one which I entirely support, and also that it is desirable that the pension schemes adopted by the Universities of the Empire should be such as to facilitate transfer, having said that, I have gone all the distance I can with Mr Gibbons. If our pension schemes are to be such as to facilitate transfer throughout the Empire, it is obvious that the scheme adopted should be the best possible.

I would submit that the first test of such a system is twofold:

- (1) Whether it makes adequate provision for any member of the staff who, by reason of ill-health—brought on mayhap by the assiduity with which he has carried on his duties—wishes to retire after 10–15 years' service.
- (2) Whether it makes satisfactory provision for the old age of the members of our staffs.

Incidentally, let me say that I consider it no part of the duty

of a University to take over liability for the responsibilities that members of the staff may incur. If a man marries, it is that man's duty to see that his wife and family are properly provided for by methods adopted by other professions, *e.g.* by taking out an insurance policy.

The next test I suggest is a financial one. The scheme ought to be such as to give the maximum benefits for the minimum contributions. Applying these tests to the Federated System, I am convinced it is not a scheme I could recommend to our brethren across the seas. Let us take the mote out of our own eye before we attempt to take it out of our brother's.

The first objection I have is that the Federated System makes no adequate provision for the man I have described, who may have to retire owing to ill-health after rendering service for 10-15 years. It has been stated to-day that under the Federated Scheme the options are numerous, and that a man with responsibilities will take out an Endowment Policy. That is true. But you have all known men who started University careers single and finished them married and with a family. It is impossible for a man to know, when joining the Federated System as an assistant, whether he is to be married or not. The options may thus become an actual detriment to the particular member.

I may state I have had five years' experience of the Federated Superannuation System in the University of Aberdeen. There we have the Federated Superannuation System for the junior members and a separate pension system, which was until recently the common system for the four Scottish Universities, for the professors.

If a man takes out an Endowment Policy, and, after serving 10-15 years, becomes so ill that he has to give up his position, how does he stand? Under the Federated Superannuation System, if he receives a salary of £1000, this man on retirement must give up his salary and not only receive no benefit from the Federated Superannuation System but must continue to pay his 5 per cent. plus the University's 10 per cent. on £1000—£150 a year—although in receipt of no salary or payment whatsoever from the University. The option to that is almost as bad. He could accept the surrender value of his policy; but those who are acquainted with insurance know that the surrender value of an Endowment Policy is very small.

Take a man who has a Deferred Annuity Policy. Under it, if the man dies or retires and does not go to another University, he gets the total premiums paid plus $3\frac{1}{2}$ per cent. interest on his

premiums. That is all the member would get if he surrenders his policy. After 5-10 years' service the total premiums amount to a small sum.

Another objection is this. As it is run, the best option is the Endowment Policy. If you take an Endowment Policy you have, as you are all aware, to be medically examined. It is not the case that all professors come to that rank from lectureships or assistants. We appoint to be our professors people from all walks of life—from the Civil Service, or teaching posts in schools and other places. A man may be appointed who is thirty-five or forty, and it is quite possible that that man may live to be eighty, although he may have some small medical defect. But the insurance companies insist on a severe medical test, so that the benefits under the Federated System are dependent on, and vary according to, the class of life of the applicant. In other words, this scheme discriminates in the amount given in benefits to its members even although these members have the same salary, the same University service, and are the same age.

I will content myself with one other objection. I have not the ages of retirement in the English Universities. I do not know if the English Universities all fix a retiring age, but in Scotland, Edinburgh is 75 for Principals and 70 for Professors, while Glasgow is 70 for Principals and 65 for Professors. Now the whole of this Federated Scheme is worked out on a basis of retirement at 60, so that the Federated System does not fit in with our scheme of University staffing.

Coming to the financial aspect of the case, I will deal first with that division of the scheme under which the contributions made by the University and the member are invested in trust securities and held for the member. I would like to mention that the Universities of Scotland were fortunate in getting a gift of a considerable sum to assist them to found a pension scheme for their junior staff. These moneys are invested and the income collected by the University and used by it for paying the premiums or contributions under the Federated Scheme.

In the United Kingdom the Universities do not pay income tax, or, if they do, they recover it. Now the Treasury has decided—and I think rightly—that we have not a case for repayment of tax deducted from the income of the funds invested for the pensions of the junior staff. The Treasury has also decided that these moneys, which we take and accumulate for members, cannot be exempted from income tax because it is not a proper pension scheme; it is a method of avoiding income

tax. You are therefore losing income tax on this money which you would get if you had a proper pension scheme.

The next financial point I come to is this. The Government of Great Britain and its education departments in Scotland and England have not adopted the Federated System. Although we all criticize Governments, I think we may perhaps admit that they would receive the best financial advice. I am prepared to follow the Government. If you take a pension scheme worked out on the same principles as the Government applies to civil servants and teachers, both in Scotland and England, you will find (and *I have actuarial authority for this*) that under such a system you will get at least as good actuarial benefits for a 10 per cent. contribution as you will get for a 15 per cent. contribution under the Federated System, a saving of 5 per cent. In other words, the total University salaries of teaching staffs as reported for last year, was, including superannuation, £1,904,000 odd, and if, after deducting payments for superannuation, you take 5 per cent. (*i.e.* the difference between the 10 per cent. under a University Scheme and the 15 per cent. under the Federated System), on that you will find it amounts to £85,000 per annum. The Universities of Great Britain, or those responsible for their management, are thus going into a system by which they will lose for the Universities no less a sum than £85,000 a year.

The time I am allowed is exhausted.

We have propounded in Aberdeen a system which will provide a pension for a member of the staff retiring (*a*) either owing to illness at any time in his career, or (*b*) after 30 years' service, and a gratuity on his death or retiral, equal, approximately, to one year's salary.

(Had time permitted, Mr Butchart intended submitting the following proposals:—

- (1) That the Universities of Great Britain adopt a uniform Pension Scheme on the lines of the Civil Service and Teachers' Pension Funds, to be run by the Universities
- (2) Having adopted the above scheme, that the Government be asked to arrange for the possibility of transferring pension rights from the Civil Service and Teachers Pension Funds to the Universities, and *vice versa*.)

SIR DONALD MACALISTER (Glasgow): As one who is under the Federated System, as all the Universities other than Aberdeen in the United Kingdom now are, I wish to say a word or two by way of explanation.

Mr Butchart has said that Aberdeen has propounded a scheme with enormous advantages; but he has not said that that scheme is in operation or that it would be allowed to come into operation. As a matter of fact, it has been rejected by the Privy Council. Aberdeen has the new Federated System for all its official staff and lecturers, but apparently thinks it does not need it for the professors. It is good enough for the lecturers, but not good enough for the professors. Why does Aberdeen not find it good enough for the professors? Because, incidentally, it, out of all the Universities, as I understand, in the country, has a large accumulation of funds for pensions which have not had to be paid out; and it could afford, out of that accumulation, to do anything it pleases for the small body of professors, and prefers to distribute that large sum by a scheme of its own rather than by joining a system which applies to all the public Universities of the country. The local conditions modify entirely the attitude of Aberdeen, although Mr Butchart has indicated that their objections refer merely to general principles. He has spoken of the Government scheme for teachers, but he has not told you that this is not a contributory scheme, as the Federated System is.

MR BUTCHART: Yes; 5 per cent. The same as the other.

SIR DONALD MACALISTER: A 5 per cent. scheme for the teachers, but not a 10 or 12½ per cent. scheme, like the other, for the University. The pension funds of the English Universities were of a minimum character. When the idea of a common transferrable pension came on, in order to get all the lecturers into it, we had to get the existing staff in on a reasonable basis right away, and make, incidentally, provision for those who, by reason of long service, could not profitably join the scheme. More than that, the Treasury itself, in order to make the Federated Scheme applicable to all the Universities in a shorter time than would otherwise have been possible, gave a considerable grant for the purpose. That grant has been accepted by Aberdeen for its senior lecturers. The conditions for professors in Aberdeen are wholly exceptional. They have a large accumulation such as no other University in the country possesses, and are proposing to use it now for the professors of the University.

There is the hard case of a professor who has to give up following an academic career by reason of ill-health after 5-10 years' service. Under the Federated Scheme he has his pension rights. What, under the present system of Aberdeen, will happen to

a professor who cannot complete ten years of service as such? He has absolutely no pension rights. Under the Federated Scheme he gets exactly what he has accumulated at the same rate as others. A professor at Aberdeen at present who does not serve 10 years—it is a hard case—is provisionless if he retires. We at least, under the Federated Scheme, have made provision for him on the same lines and principles as all the other members of the staff—principles understood by him when he takes up his post.

MR BUTCHART: I regret that there is some misapprehension. The scheme we propounded is in no way connected with the existing funds. It could be worked on an actuarial report and not on the special circumstances.

MR GIBBONS: This subject is not an easy one to discuss in a conference; it is very technical. I tried myself as far as possible to steer clear of technicalities and details, because I gathered that the main object of this conference was to consider the desirability of articulating pension schemes with the Federated Scheme, and I hardly expected to be called upon to discuss the merits of the Federated Scheme as compared with some other scheme.

It is true that I probably provoked criticism by my unwise praise of the Federated Scheme, but I felt on safe ground from the fact that it has been adopted by all the Universities and University Colleges in this country and in Scotland and Wales, and is being adopted by the colleges of Oxford and Cambridge.

I think there is no doubt about the desirability of adjusting schemes so as to enable a professor to transfer from one University to another without loss of pension rights. I do not think that "articulation," as I understand the meaning of the word, is, strictly speaking, necessary. I take it that what was in the minds of those who suggested this title was that we should consider the desirability, and, if possible, consider some means whereby transfer from one University to the other without loss could be achieved.

Mr Butchart makes the point of invalidity which he claims in favour of Aberdeen, or, at any rate, I think he said that the Federated Scheme does not provide for invalidity. If you are prepared to pay, you can provide against any contingency in an insurance policy. The framers of the Federated Scheme had in mind two main objects—old age provision, and provision against early death. Personally, after many years' experience

of a University (we have just celebrated our twenty-first birthday and I was in at the birth) I have found that, if a professor dies in harness, you cannot disregard his family. That is a fact. I have known of one or two cases where a professor has died in those circumstances, and the hat was sent round. I think the people who originally framed this scheme had that sort of thing in mind. They were all experienced in University matters. The original committee consisted of Sir William M'Cormick, Sir Alfred Dale, Sir Henry Hadow, Sir Albert Hobson, Sir Alfred Hopkinson, Sir Arthur Rücker, Sir Michael Sadler, Mr Walter Smith, and Mr W. J. H. Whittall. I had the advantage of attending the meetings of that committee. We had all the possible contingencies before us.

With regard to the medical examination which is necessary before getting an Endowment Policy, obviously that is designed for mutual protection. You can only provide the benefits at the price, by taking care about your lives; it does not mean that a life which is not first class cannot come in, but that life pays a little extra. But you must provide for the majority, and the majority of the members of the Federated Scheme can pass the medical examination as first-class lives. After all, you have to judge a scheme by its main features.

I am not quite sure that I understand Mr Butchart's point, that for 10 per cent. of salary they could achieve in the Government scheme, or was it the Aberdeen scheme——?

MR BUTCHART: You can provide benefits equal to those under the Federated Scheme for 10 per cent.

MR GIBBONS: What I want to be quite clear about is that you must equate like things to like things. The benefits under the Federated Scheme differ from those of the 1925 Teachers' Act, and they differ from the benefits of the Aberdeen scheme which has been drafted and which Mr Butchart has in mind. As I say, it is a matter for detailed consideration, and first of all we must make certain that we are comparing like things.

DR J. G. ADAMI (Liverpool): I am sorry that the delegate from Aberdeen has drawn a Scotch herring across the trail. The important matter before us, as a Congress of the Universities of the Empire, is the promotion of interchange between the different Universities of the Empire, and the lack of any articulation between the pensions and superannuation schemes of Great Britain and Ireland, the different Dominions, and I might add the United States, is terribly arresting and limiting. How

desirable it is that all difficulties in the way of interchange should be removed! That is the point I wish to impress on you. This Congress should make it very clear that if we are to encourage the migration of teachers—if, as is most desirable, they are to pass freely from one University to another, from a Dominion to the Old Country and from the Old Country to one of the Dominions, due care must be taken and due security given that the insurance scheme which provides for their pensions will continue.

I speak feelingly, because I spent twenty-seven years in a Dominion. I gave loyal service, but I get no pension at all for all those years of service. After giving my life to University work I shall get, I find, a pension of about £37 a year. I am a living example of the trouble and the anxiety due to the absence of co-operation or co-ordination, and I would urge all who are thinking of looking out for, or are being urged to take up, positions in the Dominions that, before they consent to accept a post in any of the Dominions, they make quite sure that this matter of the preservation of their claim to the same amount of pension, as if they had stayed in the Old Country is settled for them, and that there is a definite contract.

PROFESSOR WILSON (Sydney): I have very little to say which has not been said already. What I have to say is addressed rather to my fellow-delegates from the Dominions, and my object is to impress on them that the question is no longer one of leaving things as they were, because the establishment and organization in Great Britain of what I believe to be an adequate pension scheme for University teachers has become an actual menace to the vital interests of Dominion Universities. In the past we could freely appeal to men on this side occupying University positions and invite them to come over to us without any sacrifice of accrued pension rights. Now we cannot do so, and, as Dr Adami has pointed out, University teachers attracted overseas must take care that they are not sacrificing an important interest in contemplating removal. My fellow-delegates, when they return, should see to it that it is brought home to the authorities of Dominion Universities that the situation has vitally changed, that they must tackle a new situation and must see that provision is made for freedom of intermigration of University teachers, either by the "articulation" of Home and Dominion pension schemes or, if this is not indispensable, by securing an arrangement under which the pension benefits of individual migrating University teachers may be retained.

I would add one suggestion. What are we going to do about it now? This Congress is considering it, but something must be done. I think it would be too much to ask the Universities Bureau on this side to undertake the whole labour of correlating pension schemes in different Universities. I represent an overseas University which is one of a regional group, like the Dominion groups, which meet periodically in provincial conferences. Those regional conferences should themselves take up the problem, correlate the schemes of the different Universities of the group, and communicate with the Bureau, which might then perhaps attempt to summarize and correlate the various regional reports with a view to an eventual mutual understanding on this matter among the Universities of the Empire. In any case the matter ought to be taken up without delay. We cannot afford to wait five years for action to be taken, and it would not be fair to ask the Bureau here to undertake the whole work of inquiry and correlation. It is easier to begin it in those regional conferences.

The two points I have made are (1) the menace that exists to the interests of overseas Universities who will not be able so readily to obtain, as in the past, the services of men who have already entered on an academic career here; and (2) a point of mechanism, that some steps should be taken forthwith to co-ordinate and correlate the different pension systems of the overseas Universities.

SIR PHILIP HARTOG (Dacca): I want to support what was said by the last speaker, and to add something with regard to India. An Inter-University Board for India has been appointed, to which thirteen of the fifteen Universities of India have adhered. One of the subjects of consideration by the Board has been the introduction of a joint superannuation scheme for all the Universities of India.

I want to suggest that the Bureau of the Universities of the Empire should now bring this subject before the Indian Inter-University Board. I think that would be very helpful. As far as one can see, there will be no more appointments made in the Indian educational service for some time, though no final decision has been arrived at. But more and more the Indian Universities will depend for such help as they may require on *ad hoc* appointments from England, some of them short-period appointments. And India will not get the men it wants from this country unless their pension interests are provided for.

I should like to add one word with regard to the criticism of

Mr Butchart on the Federated Superannuation Scheme. It is quite clear that the actuaries whom he has consulted differ from the actuaries who were consulted by the eminent and distinguished committee that drew up the Scheme. I do not want to start a long discussion here, but I cannot understand where that £85,000 of which he spoke goes to unless it is into the profits of the insurance companies. But if you take out an endowment insurance with profits, as is often done, I do not see how you can lose anything at all.

At the close of the Final Session of Congress

PROFESSOR HOLME (Sydney) said: I have been asked to move this resolution of thanks, which, I am sure, we all feel to be due and to be one without which we could not separate to-day:

That the best thanks of the Congress be conveyed to the Vice-Chancellor, the Council of the Senate, the Congress Committee, and the several Colleges of the University of Cambridge, for the abounding hospitality they have extended to the officers, delegates, representatives, and other members of the Third Congress of the Universities of the Empire; for the fraternal warmth of their welcome; and for the opportunities they have offered to their guests to learn something of the spirit, the characteristics, and the charm of the ancient and illustrious University of Cambridge.

It is true that we are not so large a meeting now as has been usual in the course of these proceedings, but we are all of us people who have followed the meetings right through and who can fairly claim to represent the whole body of delegates.

I thought, as you, Sir, gave your introductory address, of certain lines in our literature relating to a long prologue which did not seem to have immediate relevance to the subject prescribed. I hope you will pardon me for so indicating the first effect produced as that of a strange preamble of a tale. We had met to discuss a pensions scheme, and we were wafted right away from our business to much more pleasant realms of philosophy. We were presently conscious of being wafted back again, with equal delight, and it seemed to me that that was an extremely happy mode of introduction because it helped to teach us that there is a philosophy underlying all the detailed business with which we have been dealing. It has all its higher aspect, and we ought never to forget, even when down on the levels which appeal least to me, those of finance, that there, as well as elsewhere, the philosophy exists and our ideal is a motive force. I should like, if you will allow me on behalf of the meeting, to thank you for having given us that lesson. Upon the distinguished precedent, may I too risk a little seeming irrelevance?

The business of such a Congress as this is not a thing that you can wholly put down on a paper of topics to be discussed. It includes the business of becoming acquainted with some of the best that is being thought and done in all our Universities. We do that, I am quite sure, just as much while attending a

musical recital in the court of St John's College, a garden-party at Downing College, or another at Christ's College, and enjoying some of the profuse private hospitality, as by sitting here and talking over things technical.

This Congress to me was a new experience. I have been in a manner closely associated with the Bureau of the Universities* of the British Empire before this, but I have never had the honour of attending one of the Congresses. I wish to say—because I think it is the feeling of other delegates who are in the same position—that the Congress has exceeded my most sanguine expectations. I did not believe that there was so much encouragement of mind and refreshment of spirit to be got out of a strictly professional gathering of that kind. I am glad to have been enlightened, and I have now not only one of the happiest recollections of my life but also one of the most hopeful assurances I have ever received of the solidarity of the Universities of the British Empire and of their having made common cause in their great task.

So, returning to our business, in accordance with the precedent, I add that I was pleasantly enlightened in respect to the character of the work that would interest me most. I did not, for example, expect to get so much out of the discussion on the foundation of a school of advanced legal studies. Legal studies are quite outside my ordinary line of occupation, but I followed that exposition with an interest of which I had not believed myself capable. Similarly with the pension scheme debated this afternoon. Anything with insurance companies in it has always been rather unpleasing to me. To begin with, I have never been able to get enough insurance to cover my small responsibility in life, for the reason that some thirty years ago the first insurance company to which I applied refused me on the ground that I was a life on which nobody would risk any money: it appeared that I was 30 per cent. under weight. A little while ago I applied for some more insurance and was declined on the ground that I was 30 per cent. over weight. There is no pleasing these insurance companies, but I have no doubt that they exist because they perform a useful function and we should be ill-advised if we did not let them come to our assistance. They are invaluable without being infallible.

I would remind you also that we owe a very deep debt of gratitude to those who have managed and conducted the business of our Congress. If I might mention Dr Hill in particular, I should like to do so, and to tell you that I was among those who went away visiting provincial Universities, and I went

REPORT
OF THE
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REPORT TO THE DELEGATES ATTENDING THE THIRD CONGRESS OF THE UNIVERSITIES OF THE EMPIRE TO BE HELD AT CAMBRIDGE IN JULY 1926.

At the Congress which met in London in 1912, all the fifty-three Universities of the Empire (now increased in number to sixty-eight) were represented. At their final meeting the Delegates adopted resolutions providing for the establishment of a central Universities Bureau. In a paper read by the late Sir George Parkin, and discussed by Congress, the objects and aims of the proposed Bureau were described as—the utilization of the “experience and experiment in educational organization” made in the different parts of the Empire, and the placing of the lessons learned, and a knowledge of the progress made, at the service of all. “The first duty of the Central Bureau would be to collect University information from every part of the Empire and to put it in a suitable form for easy distribution.” This was to be accomplished in the first place by the production of a Universities Year-Book, which would give in clear and concise form all essential information about the Universities of the Empire, and the opportunities which they offer for general or special training. Year by year the progress made by each of them, changes of staff, new work undertaken, the latest University statistics, and other matters of general interest would be recorded. Another function assigned to the Bureau was the “Distribution throughout the University world of information regarding vacant appointments, so that the whole field of possible applicants could be reached at once, without the infinite individual trouble that must now be taken by any University which has a post to fill.” The temporary exchange of professors and other teachers was to be arranged; migration of students from one University to another facilitated. Full information and sound advice were to be supplied to migrating students with a view to enabling them, with the least expenditure of time and trouble, to discover the University centre in which they can best get the training which they need. Various matters of common interest were to be considered by University Con-

ferences called by the Bureau—*e.g.* the adoption, so far as practicable, of a uniform matriculation standard, and of other arrangements likely to facilitate the easy movement of students from University to University, the work done and fully tested in one being freely accepted in all others. The Bureau was also to promote “subdivision of labour and a certain degree of specialization as between the Universities”; “to carry on the work initiated by the present Congress; to maintain its connexion with any that follow; to furnish a channel of free communication in the intervals.”

Under the scheme adopted by Congress, a Bureau Committee of Congress of fourteen members—seven nominated by the Universities overseas, and seven by the Universities of the Homeland—was appointed.

A room was placed at the disposal of the Committee in the Imperial Institute, and there its work was carried on from the end of 1912 until 1919.

Dr Alex Hill, who from the date of Dr R. D. Roberts' death in November 1911 had acted as Organizing Secretary of the Congress, having consented to serve as Honorary Secretary, proceeded, on behalf of the Committee, to secure contributions from the Universities for the maintenance of the Bureau, to procure the appointment of a correspondent in each University, to plan the Year-Book and to prepare the sections relating to the several Universities, and to correspond with the Universities regarding the services which the Bureau might hope to render to them.

In 1913, the Bureau being fairly started, the Committee agreed to appoint an Assistant Secretary, but asked Dr Hill to continue to supervise the work. They were very fortunate in securing the services of Mr W. H. Dawson of the Indian Civil Service. As Mr Dawson joined H.M. Forces in August 1914, and was not released until 1919, all the work of the Bureau devolved upon the Honorary Secretary, ably supported by Miss Potter, who has served the Bureau from its foundation.

On the outbreak of War many of the normal activities of the Bureau were necessarily curtailed. At the same time, other and exigent duties were thrown upon it. Thus, during the autumn of 1914, the Honorary Secretary, at the instance of the Home Authorities, opened a correspondence with the Heads and other members of the staffs of Universities and Colleges of America and other non-belligerent countries. He supplied them with copies of books and pamphlets, which were prepared under authorized direction, upon the origin of the War and the

responsibility for it of the Central Powers, many of them translated into foreign languages.

As the outcome of War experience, various functions of the Bureau assumed an importance much greater than was foreseen by its organizers—such, for example, as the development of schemes of systematic post-graduation study and research, recognized by a common degree (Ph.D.) open to graduates of British Universities overseas, and of foreign countries, equally with those of the Universities of the Homeland. It was also called upon to undertake other duties which are not only of Imperial but also of International importance, and, speaking generally, it has disclosed to the Universities the increase of strength which they may, without any sacrifice of their individual freedom, draw from a properly organized co-operation. To the Government of this country, in which the Universities are not under the jurisdiction of a Minister of Public Instruction, it has made plain the need of a joint University Committee or Association with which the Government can communicate on matters relating to Universities abroad, and to which questions of common University interest within the British Isles may be referred.

In the spring of 1919 the Government, with a view to increasing the scope and resources of the Bureau, offered to contribute a capital sum of £5000 to enable the Committee to take and furnish premises suitable for its work, on two conditions, viz.: (1) that the Bureau Committee be transformed into a corporate body capable of holding property and of receiving and administering this grant; and (2) that the Universities should undertake to provide it with an income adequate to its maintenance on a larger scale. With a view to meeting the first condition with the least possible delay, the Committee applied for, and obtained from the Board of Trade, a licence of incorporation as a registered Company (with the omission of the word "limited"). The second condition was met, so far as the Universities of the United Kingdom were concerned, by each of them promising an annual contribution of £100; each of the independent University Colleges also contributing £50. Universities overseas also have made generous contributions.

The acquisition of a house in Russell Square placed the Bureau in a position to meet its social and academic obligations with greater effectiveness than had been possible heretofore. It is generally regarded as the first "place of call" of visitors from foreign countries and from the King's Dominions overseas. Here university men and women, whether teachers or students, obtain information with regard to the Universities of Great

Britain and Ireland, and receive introductions to the recognized authorities in the subjects in which they take an interest. In this and many other ways everything practicable is done to ensure that their sojourn in the Homeland shall be as profitable as goodwill can make it.

In accordance with a scheme for housing the "consulates" of foreign Universities in the same building with the Bureau, rooms were let to the American University Union in Europe, the Office National des Universités et Ecoles Françaises (now, unfortunately, closed, the work being transferred to the Institut Français), and the British Bureau of the Danish Students' International Committee representing the University of Copenhagen (on the understanding that the room is to be shared with other Scandinavian countries if, and when, they are prepared to establish Bureaux in London). It is unnecessary to point out how great are the facilities which this arrangement affords for the efficient discharge of the international service of the Universities.

The chief activities of the Bureau may be summarized under the following heads:—

Congress.—The summoning of Congress at intervals of five years is, as already stated, a duty with which the Bureau was charged by the Delegates who attended the first meeting in 1912. Owing to the impossibility of securing passages on steamships during the two years immediately following the War, the second meeting was deferred until 1921. It was held in Oxford (*vide* the Proceedings published in full in the Congress Report).

Conferences.—The Conference of May 1917, at which attendance of representatives of the Universities and non-constituent University Colleges of the United Kingdom was large, may be said to have been a direct outcome of the War. It was summoned to consider the situation arising out of the closing of the German and Austrian Universities to graduate students from the countries of the Allies, but assumed the much wider scope indicated by the following resolution, adopted *nem. con.*: "For the better promotion of research in this country, and for the encouragement of advanced work by 'graduate' students from abroad, a degree or title of Doctor should be instituted . . . etc." (Proceedings printed.) This Conference, which may be referred to as the Standing Conference, to distinguish it from various other Conferences which have been summoned to consider special questions, was adjourned from time to time. In May 1918 it was resolved: "That after hearing the reports from the Universities on the resolutions adopted by the Conference in 1917, the Conference reaffirms these resolutions and commends them to the Universities

as a basis for common action." (Proceedings printed.) It was also unanimously agreed: "That this Conference considers it desirable, in the interest of the Universities and of the nation, that steps should be taken to promote co-operation and mutual consultation among the Universities of Great Britain and Ireland." And further: "That the Vice-Chancellor or Principal of each University, or a deputy appointed by him, together with the Executive Committee of the Universities Bureau, be appointed a Standing Committee to consider any matters of common interest arising out of the proceedings of this Conference or submitted to it by the Government, and to report from time to time to the Conference." The conditions and regulations for the new research degree of Doctor of Philosophy were further considered at adjourned meetings of Conference in January and March 1919. The resulting legislation is summarised in the Universities Year-Book.

Other Conferences, specially convened at various dates, have taken into consideration the appointment of members of Lord Balfour's University Mission to America (1918-19), Interchange of Teachers and Students, the Tenure of University offices, Superannuation and Provision of Pensions, the Relations of Universities and Training Colleges, and certain other matters.

Standing Committee.—The Standing Committee of Vice-Chancellors and Principals, established in 1918, meets once a quarter for the discussion of matters of interest to the Universities in common. The Bureau prepares for it such Returns of Information and conducts such correspondence as it may direct. The Committee has no executive functions. After mutual consultation, its members bring before their respective Councils and Senates such of the matters discussed as they deem suitable. The following may be cited as illustrations of the kind of subjects of general interest which have been discussed by the Standing Committee: The admission to the home Universities of Australian, Canadian, and other overseas students who had served in H.M. Forces; the Government Scheme for training demobilized officers and men; the preparation of pamphlets on facilities for advanced study and research in the several Universities and their distribution by the Bureau; the need for an increase in the Universities' contributions to the Superannuation Fund (which led to the adoption of 10 per cent. in place of 5 per cent.); arrangements for sending a University Mission to France at the invitation of the French Government and to Belgium at the invitation of the Belgian Government; the Basle Conference with Swiss Universities; the equivalence of degrees and diplomas

of foreign Universities with those of Universities of the British Empire; the recognition by the Universities of the United Kingdom of matriculation requirements of Universities outside the United Kingdom; the professions for which students were preparing in 1920 (a classified list was prepared by the Bureau and distributed to the Universities, the Board of Education, the University Grants Committee, etc.); the salaries of professors and lecturers, the scales to be adopted, and the need for additions; the liability of University funds to Income Tax and of hostels to Inhabited House Duty; the replenishing of the libraries of the Universities of Louvain, Nancy, and Tokyo; the supplying of German and Austrian Universities with learned, especially periodical, publications under a system of barter; University Franchise and Registration.

Annual Conferences.—At the Annual Conferences of the Universities of Great Britain and Ireland which have met in London from 1922 to 1925, the following topics were discussed:—

1922. The urgent need for the provision of enlarged opportunities for advanced study and research in the British Universities; the increase of residential accommodation for undergraduate and other students; specialization in certain subjects of study by certain Universities; the organization of Adult Education as an integral part of the work of the Universities.—1923. The financial outlook of the Universities; music as a university subject; the Universities and training for administrative and municipal life; Labour and the Universities.—1924. Directions in which Universities might profitably develop, at the present time, were funds available; the Ph.D. degree as an encouragement to higher study and research; Universities and research in relation to the development of the natural resources and the industries of the Empire; interchange of University teachers and students.—1925. The function of the Universities in relation to Agriculture; physical training and medical Supervision of University students; the relations of Universities to foreign National Institutes established in Great Britain and similar British Institutes abroad.

The delegates to the first Congress resolved "That in the opinion of this Congress it is desirable that the Universities of the various Dominions of the King overseas should arrange for periodical meetings of their representatives." From time to time the Bureau called attention to this recommendation until it was given effect. The Canadian Universities have met in conference, annually, since 1916. Lists of the subjects selected for discussion are to be found in recent editions of the Year-Book.

A Standing Advisory Committee was set up by the Australian Universities in 1920. A conference of their representatives was held in the following year and has been repeated annually. In South Africa the Vice-Chancellors of the Universities act as a Joint Committee. They have power to formulate regulations dealing with matters of common interest. At a conference held at Simla in 1924 it was resolved to set up an Inter-University Board. Copies of the Proceedings of the first and second Annual Conferences (1925 and 1926) can be obtained from the Secretary to the Board, Prof. N. S. Subba Rao, M.A., Maharaja's College, Mysore.

Deputations to the Chancellor of the Exchequer.—In November 1918 a deputation organized by the Bureau was received by the Chancellor of the Exchequer, the President of the Board of Education, and the Secretary to the Committee of Council on Education in Scotland. The Parliamentary Grant to Universities was considerably increased in the succeeding financial year.

In the autumn of 1924 a deputation arranged by the Bureau represented to the Chancellor of the Exchequer that the Universities were being crippled by the 20 per cent. reduction of their grant made by the Treasury in compliance with the recommendations of the Geddes Committee for all spending departments. The sum thus cut off was restored to the Universities Grant in the Estimates for the following year.

Promotion of Interchange.—When, after the return of the British Mission from U.S.A., an Interchange Committee of the Bureau was set up, the temporary migration of undergraduates was the chief intention in the minds of its members. Experience has taught that the British curriculum cannot be interdigitated with the curriculum of any foreign country. Migration must, normally, be deferred until after graduation. Efforts have been made to arrange for exchange of posts by teachers ever since the foundation of the Bureau. Want of success in securing exchanges of senior posts has made it clear that this is scarcely practicable. On the other hand, the Bureau has, with the help of its Interchange Correspondents, arranged for the temporary exchange of junior posts between teachers in Great Britain and teachers in the Dominions, to their complete satisfaction and with the full concurrence of the Universities concerned. The generosity of the Shipping Companies, who in 1924 placed eight first-class return passages at the disposal of the Standing Committee of Vice-Chancellors, has very greatly facilitated interchange with Australia and New Zealand. The free passages are to be allotted to graduates of the home Universities who desire to visit these

